DOCUMENT RESUME

ED 061 180 SP 005 628

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TITLE	Design of a Survey for Determining Training and Personnel Requirements for Educational Research, Development, Dissemination and Evaluation. Vol. 2, Development Pretest of Questionnaires. Final Report.
INSTITUTION	Far West Lab. for Educational Research and Development, Berkeley, Calif.; Stanford Research Inst., Menlo Park, Calif. Educational Policy Research Center.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C. Bureau of Research.
PUB DATE	Jan 72
GRANT	OEG-0-71-1194
NOTE	178p.
EDRS PRICE	MF-$0.65 HC-$6.58
DESCRIPTORS	*Data Collection; *Educational Development; *Educational Research; *Manpower Development; *Surveys

ABSTRACT

This study describes the development and design for pretesting survey instruments required for the development of programs sampling the supply and demand for educational research, development, diffusion, and evaluation personnel. The major areas of concern include: 1) the determination of number, distribution by type, and location of educational R-D-D-E personnel; 2) training requirements including areas of training, previous experience, and employer-employee training needs; 3) recruiting and selection information; and 4) planning training program content. The survey will be conducted on a national probability sample basis and give a more definitive picture of current trends regarding R-D-D-E personnel. The estimates can serve as projections for the R-D-D-E personnel and budget needs. Appendixes include American Education Research Association questionnaire, pretest employer and employee questionnaires, revised employer and employee questionnaires, and finally the cost of preparing and mailing questionnaires for field test. (Related document is SP 005 630, a design for a biennial survey which would provide a nationwide, in-depth sampling of supply and demand for educational research, development, diffusion, and evaluation personnel.) (MJM)

ED 061180

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FINAL REPORT
Project No. 0 9035
Grant No. OEG-0-71-1194

DESIGN OF A SURVEY FOR DETERMINING TRAINING AND PERSONNEL REQUIREMENTS FOR EDUCATIONAL RESEARCH, DEVELOPMENT, DISSEMINATION AND EVALUATION

VOLUME TWO
(one of two volumes)

DEVELOPMENT PRETEST OF QUESTIONNAIRES

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January 1972

Produced by
FAR WEST LABORATORY FOR EDUCATIONAL
RESEARCH AND DEVELOPMENT
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SP005628

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Development of Survey Instruments for the Study of Educational Research, Development, Diffusion and Evaluation Training Requirements

THE PROBLEM

Information concerning the job functions and training of personnel engaged in educational Research, Development, Diffusion and Evaluation activities (R-D-D-E) is needed by the Research Training Branch (RTB), Division of Research and Development Resources, National Center For Educational Research and Development (NCERD) in order to assist in the development of programs responding to requirements for trained personnel in those activity areas. Certain of the questions relating to types of employment, numbers employed, experience and educational backgrounds of current employees, training needs and areas of current and future employment can best be answered through data from a national survey of employers of R-D-D-E personnel and of the personnel themselves. Stanford Research Institute has been given the responsibility for developing and pretesting the required survey instruments.

There are a number of RTB tasks to which the survey information will contribute. The first of these is the determination of the number, distribution by type, and location of educational R-D-D-E personnel. A number of previous studies have provided some of the information needed in these areas, but the proposed survey will be conducted on a national probability sample basis and give a more definitive picture of the current situation as regards educational R-D-D-E personnel. The estimates from the survey can be used as a basis for projections of the need for educational R-D-D-E personnel as that need relates to increasing R-D-D-E budgets.

A second major focus of the survey will be training requirements, since RTB must develop plans and programs and specify funding for consortia or other training arrangements. Survey items relating to disciplines in which current R-D-D-E employees are trained, previous experience and employees' and supervisors' stated training needs will contribute to such planning and programming. A related matter is that of the transferability of personnel trained in behavioral or social science or in other disciplines into educational R-D-D-E jobs. Such personnel constitute a pool from which needed employees might be drawn, and it will be useful to know what kinds of skills they may have, and types of previous employment and training needs as perceived by themselves and their supervisors. Such information will provide one basis for planning retraining or updating programs.

Planning training program content requires knowledge of the skills needed in various kinds of R-D-D-E jobs, and the survey will provide such information as well.

Recruiting and selection information will also be provided by the survey.

QUESTIONS ORIGINALLY POSED BY THE RESEARCH TRAINING BRANCH

The following questions were posed originally by RTB for possible inclusion in the survey:

- How many people are presently (at the time of the survey) employed in educational R-D-D-E activities in the United States?
- In what types of activities are they employed?
- How many are employed at each of several professionals levels?
- What are the average annual salaries by levels?
- What proportions are full time and part time employees?
- How are educational R-D-D-E employees distributed with respect to ethnic groups, sex and geography?
- In what types of institutions are educational R-D-D-E personnel employed?
- What kinds of job preparation have they had, including formal preservice education, inservice education and training and on the job training and experience?
- What is the average length of service in the same job activity, at the same level and in the same institution?
- What value level do employees assign to their work as compared to other jobs for which they might be qualified?
- What possibilities for advancement do they see in their work?
- What proportion view themselves as skilled in other areas of education?
- How many additional persons will be employed in educational R-D-D-E in three years from the period of the survey?
- How much additional employment will result from turnover rather than growth as personnel leave educational R-D-D-E or are promoted.

- In a non-growth situation, how will changes in R-D-D-E activities be reflected in demands for differing job skills?
- If needed skills remain stable, how much additional employment will result from increased funding of educational R-D-D-E?
- How will fluctuation in educational priorities and funding be reflected in differing demands for job skills?
- What are the preferences for training by type, i.e., preemployment, formal postemployment, or on-the-job, and what is the willingness of employers to pay for needed employee training?
- What kinds of recruitment and selection procedures and criteria are used?
- What importance do employers place on degrees as employment requirements?
- What skills and skill groupings are needed in educational R-D-D-E?
- At what level do employers rate quality of skills in their employees?
- How satisfied are employees with their R-D-D-E jobs?

The questions were many and diverse, and the task was to fit them into instruments of usable length and minimal complexity so as to obtain a satisfactory rate of return.

DEVELOPMENT OF THE QUESTIONNAIRES

Two basic types of instruments were required, one to be filled out by employers or supervisors and one by employees. A substantial body of background information was examined prior to designing the questionnaires and writing the items. In particular, the listing of R-D-D-E skills prepared by the American Educational Research Association (AERA) Task Force on Training of Educational Research Personnel was found to be comprehensive and very useful. The pretest questionnaires used most of these items substantially as they were originally written. All of the items are given in Appendix A. Another source that provided item formats for the final version of the questionnaires was The General Position Activities Questionnaire prepared by Teaching Research, a division of the Oregon State System of Education.

Ultimately, two versions of the employer questionnaire, designed to be used by two different types of employers, and four versions of the employee questionnaire were produced and pretested. The necessity for four versions of the employee instrument was based on our desire to use most of the 94 comprehensive skill items on the AERA list, but to reduce the response burden on any one individual, in accordance with the general guideline for all questionnaires that they require minimum respondent time consistent with the valid and reliable acquisition of the necessary survey information.

Questionnaires were designed for use in a two-stage survey with employer questionnaires mailed first, followed by the employee questionnaires sent to a sample of employees selected on information provided by employers on their questionnaires.

Format and content of both types of questionnaires were heavily influenced by the information obtained in a series of interviews conducted with local education agency personnel and with supervisors and employees in a variety of research and development organizations in the San Francisco Bay Area. These interviews included discussion of the RTB information needs in relation to the kinds of information that each type of agency could and would be willing to provide, consideration of appropriate formats for various kinds of questions, and general discussion of the problems relating to R-D-D-E employment and training.

Employer Questionnaires

Two primary types of employers of R-D-D-E personnel were to be surveyed. The first of these were leaders of educational R-D-D-E projects funded by the U. S. Office of Education, the Office of Economic Opportunity, or the National Science Foundation. The second were leaders of R-D-D-E units in school districts. Additional smaller but not less important groups of respondents included leaders of projects or units situated in governmental bodies at Federal, State or County levels and personnel in Federally funded research and development laboratories and centers. It was hoped that questionnaires prepared for the first two categories would also be appropriate for these latter groups with minimal modification.

The previously listed questions posed by RTB formed the basis for development of the following areas that were covered in the employer questionnaire:

- Identification of respondents, their institutions and projects or work units (identification information asked for in questionnaires sent to project leaders differed in some respects from that to be obtained from local education agency work units)
- Identification by percentage of time spent on each of the kinds of work performed by the units or project personnel

- Identification of skills and content area knowledge difficult to find in recruiting and selecting personnel
- Recruiting procedures and methods used with estimates of their effectiveness
- Selection techniques used with estimates of their effectiveness
- Numbers of employees and full time equivalents in each of seven personnel categories including director or principal investigator, research and development associate, assistant, intern, technician paraprofessional and clerical, with estimates of education and experience required for successful performance in each category and listing of formal organizational requirements for each category
- Estimates of adequacy of previous training of current employees in each personnel category
- Description of kinds of in-house employee training used with specification of frequency of use
- Estimates of need for additional training in each of a variety of educational R-D-D-E activities (selected from the AERA list) and indication of areas in which training materials would be desired
- Indication of value placed on each of a variety of training approaches for current employees
- Indication of number of current unfilled positions, losses in the last year and additions in the last year for each personnel category
- Estimates of number of employees in each personnel category to be hired in the coming two years

- Estimates of need for additional employees by type and skill if funding were increased by 50% in the coming year

It was anticipated that information in each of those areas drawn from appropriately structured samples of project directors, local education agency unit directors and federal and state education personnel would provide a full picture of personnel shortages and training needs seen from the point of view of employers of educational R-D-D-E personnel

The employer questionnaire was also to ask for a listing by name of current employees from which a sample of employees could be drawn by the survey agency. The sample members were then to be sent employee questionnaires.

The employer questionnaire was subjected to a number of revisions in order to reflect the comments of the persons who were interviewed and to reduce it in length and complexity so as to enhance the probability of achieving a high return rate of usable questionnaires. It was recognized that the number of areas to be covered might be so great as to make the pretest questionnaire excessively long, but we felt it necessary to use the pretest results as one of the primary bases for cuts, so there seemed to be no alternative to mailing a long version informing the respondents that it was a pretest and asking their cooperation in helping us to tighten up the instruments for ultimate use.

Copies of the pretest mailout employer questionnaires are in Appendix B.

Employee Questionnaires

As indicated above employees in the projects and units to whom employer questionnaires were sent were also asked to respond to a questionnaire concerning their work activities, experience and training. It was desired also that the employee and employer questionnaire have some common items so as to permit cross comparisons between the two groups of respondents.

The following areas based on the original RTB questions covered in the employee questionnaires:

- Identification of respondents, their institutions and projects or work units, their ages, sex, salaries, and formal education levels
- Indications of levels of involvement in a variety of R-D-D-E activities, experiential or educational source of the acquisition of the skills needed for each activity and estimates of the need for additional training in the skills needed for each activity.
- Amount of formal course work in each of a variety of educational areas
- Amount of in-house or on-the-job training obtained since employment in R-D-D-E fields
- Specification of educational R-D-D-E in which respondents are currently active with their estimates of the degree to which their skills have increased in each activity during present employment and of the amount of additional training needed in each activity area. (The activity areas listed were identical with those on the employer forms so as to permit comparisons of the training need perceptions of both groups of respondents)
- Types of previous employers, years spent with each and estimates of relevance of each previous type of employment to current jobs
- Existing skills not used on current jobs
- Job satisfaction

- Estimate of advancement possibilities
- Value to respondent of various types of training or training materials
- Importance of college credit for additional training

There were four versions of Questionnaire B for employees. They differed only in respect to the lists of educational R-D-D-E items that were included in each. The problem was to use all of the carefully developed list of AERA items, but not to overburden any one respondent. Ten items were common to all lists. The remaining 84 items were divided equally (21 each) among the four versions so that each individual would respond to a total of 31. The wording of some items was changed (usually by shortening) for our purposes.

The ten common items were as follows:

- Identifying and delineating significant researchable problems
- Interpreting and drawing appropriate conclusions and implications from data analyses
- Specifying desired performance outcomes (objectives) of instruction
- Describing a product to be developed
- Selecting the most effective dissemination vehicles to convey information to target groups
- Implementing actual dissemination, including the direction of technical production personnel
- Identifying and rating alternative strategies for attaining the selected educational system objectives
- Identifying and rating available educational program resources (human, material and financial) and/or potential sources of support

- Developing general criteria and designing data collection procedures for application in measuring the effectiveness and efficiency of existing innovative practices and products,
- Selecting (or developing) and using techniques of measurement to yield information relevant to standards to be used

The set of ten items listed were chosen as the common ones because they include some from each of the R-D-D-E categories and because the items listed were among those receiving the highest number of mentions as most important or critical in the AERA survey and regarded as significant for the proposed survey.

Information from employee questionnaires was expected to supplement and complement that from employer questionnaires so as to provide a comprehensive picture of educational R-D-D-E personnel characteristics, experience and training backgrounds and training needs.

The mailout employee questionnaires are in Appendix B.

DESCRIPTION AND CONDUCT OF THE FIELD TEST

The field test was designed to duplicate as much as possible under the necessary time constraints, the conditions that would obtain in the main survey effort itself. Respondents were informed, however, that the questionnaires were being pretested and they were asked to comment on any and all aspects of content of format and to suggest any changes that they felt might be appropriate. Both the response rate and the response time may have been affected by the request to comment on the questionnaire, but it was felt necessary to do so in order to pretest thoroughly.

The mail pretest had been preceded by a substantial number of interviews with project and Local Education Agency (LEA) unit directors and their subordinates and with questionnaire specialists in which earlier versions of the questionnaires were gone over in detail to obtain comments and criticisms. Interviewees were asked to indicate the appropriateness of each of the items as it related to their activities, whether or not they could answer each unequivocally, and their detection of ambiguities or redundancies. The interview results were used to make further revisions in the questionnaires and procedures prior to the pretest mailout.

A special interview pretest involving Federal Government personnel was also carried out. About one dozen interviews were conducted. Respondents were asked to fill out the questionnaires while the SRI interviewer was present, and to comment on each item as they felt appropriate. Most of the respondents were from the Office of Education but the National Science Foundation and the Office of Economic Opportunity were represented as well.

Sample for the Mail Pretest

The mail questionnaire pretest was conducted primarily in the San Francisco Bay Area with some additional mailout to Southern California, Nevada, and Oregon. It was felt that a sample chosen from these areas would be sufficiently representative for pretest purposes, that the response time might be reduced by the shorter distances and that it would be easier to conduct any necessary telephone followup if the pretest were localized.

The mail questionnaire sample of California School Districts was selected according to size of the district based on student census data. The districts ranged in size from 1,000 to 770,000 and were further subdivided into the following intervals.

District Size	Number of Districts Sampled
50,000 or more	9
25,000 to 49,999	12
12,000 to 24,999	17
Less than 12,000	26
	Total sample 64

The second population sampled consisted of universities and organizations with current on-going projects related to educational R-D-D-E. These projects were categorized by dollar amount of the contract or grant with a range from $5,000 to over $200,000 and divided into the following intervals.

Project Dollar Amount	Number of Projects Sampled
200,000 or more	11
100,000 to 199,999	10
50,000 to 99,999	11
Less than 50,000	9
	Total sample 41

Another group to whom questionnaires were sent were Federally sponsored Research and Development Laboratories and Centers. These organizations are major employers of R-D-D-E personnel, and it was essential that they be included.

Questionnaires were also sent to the State Departments of Education in California, Nevada, and Oregon.

For the purposes of the pre-test, only two of the four employee forms were used. The overall scheme for the mailing was as follows:

	Package with Questionnaire A and 4 Questionnaire B		Questionnaire A only to return list of names		Total sent
	Form B1	Form B2	Form B1	Form B2	
School District	22	20	12	10	64
Project or Unit Director	15	12	8	6	41
Total	37	32	20	16	105

Description of the Questionnaire Mailing

Two general methods were employed in mailing the questionnaires to both project directors and school districts. The first of these involved enclosing four "employee" forms (Questionnaire B) with the "employer" form (Questionnaire A) with the request that the individual receiving the package route them to the appropriate respondents. The second method included a page in Questionnaire A on which the respondent could write in the names of a sample of individuals working on the project who would be potential respondents on Questionnaire B. A procedure for choosing the names from a roster of project or unit staff was included also. The intent of this dual procedure was to try out both methods for possible future use in the final survey.

The ultimate choice of method was to be based on the kinds of responses received from the two approaches, on which method would produce the most satisfactory sample of employees and on any time limitations that might exist, since two separate mailings may be expected to take longer in view of the need to get fairly complete returns from the first mailing before structuring the sample and sending out the second mailing. The latter procedure has an advantage, however, in that it permits the survey contractor to choose the sample from a complete roster rather than having its choice based on local sampling that might not always be carried out strictly in accordance with the instructions given.

Questionnaire Returns

All Questionnaires were mailed on or before November 20, 1971 with the first returns being received approximately four days later. Between the time of the initial return and December 3, 1971 (the first two week period) there were 30 returns from school districts and 8 from project or unit directors. During the following three week period the returns were 9 and 6 respectively. Although these figures represent both complete and incomplete forms, they do indicate that the majority of responses will be received within two or three weeks of the initial mailing date. This is consistent with SRI experience in previous surveys.

Of the returns received during the first two weeks there were three completed by Project Leaders and three completed by School Districts. Three incomplete returns were received from Project Leaders and 23 from School Districts. It should be noted that most of the incomplete returns from School Districts resulted from the fact that they did not employ at least one full time person or full-time equivalent in R-D-D-E as they understood the descriptions of these activities. We established the criterion of one full time employee or equivalent as determined whether or not the form should be filled out. A few incompletes were from districts that routinely refuse to fill out questionnaires, of which there are an increasing number. A probable additional factor in accounting for low return rates in recognition that there have been previous and fairly recent surveys in this field and an inability to understand why it is necessary to conduct another survey. Some projects involve only one or two people, and it may have been difficult for them to see how the personnel survey was relevant to their activities, especially if employees are graduate students or other faculty members. A few commented to that effect. Some directors of larger projects could not see the relevance of the survey to their concerns, felt that their organization, staffing and funding were not appropriate to the survey questions, that previous work with which they were familiar had already covered the area or simply did not want to take the time to fill out an instrument relating only peripherally to their work.

All pretest returns were examined carefully so as to insure that no relevant comments were missed, but there was no attempt to tabulate the results in view of the awareness of the respondents that the questionnaires were being pretested, the limited returns in some categories, and our primary interest in format and wording rather than specific responses to the questions.

Comments and Recommendations Received in Returns

The mail pretest returns included a number of comments, recommendations and suggested changes. The following (listed roughly in order of frequency of mention from highest to lowest) appeared most prominently:

- The questionnaires should be reduced in length. (The pretest instruments had, of course, contained more items than would ultimately be used, but we felt it essential to get reactions to all of them in order to determine which ones should be selected for the final questionnaires.)
- The number of R-D-D-E activity and skill items should be reduced on both questionnaires
- The multiple responses required for the R-D-D-E activity and skill items should be reduced on the employee questionnaire
- The R-D-D-E activity and skill items should be reworded, made more pointed and shortened on both questionnaires
- The item on the employer questionnaire having to do with percentages of time devoted to various kinds of activities should be reformatted and the response task simplified.
- The question on the employer questionnaire asking for an indication of need for training for employees in each of a number of activities should be eliminated because the employer could not make such judgements for all of his employees considered as a group
- The personnel categories on the employer questionnaire should be reduced in number and consolidated so as to make it clear what the distinctions are. Some organizations use other systems of categorization, and there is insufficient uniformity to permit unequivocal responses to the item.

Comments on the Questionnaires from Federal Agency Personnel

Federal Agency respondents filled out the questionnaires while the SRI interviewer was present so there was an opportunity for the exchange of ideas. The following comments were made:

- The questionnaires lack direct relevance to the work activities and positions of most Federal employees, primarily because they administer and monitor the R-D-D-E activities of others rather than conducting them.
- Questions relating to funding and its relationship to manpower have a different meaning for Federal personnel, since budget justifications must include specific personnel requirements.
- Questionnaires should be shortened so as to conserve respondent time.
- There is some confusion about tenure in the present job for Federal employees since they often transfer within an organization.
- The list of activities in the employee questionnaire should be shortened and meanings clarified.
- On the employer questionnaire, the list of activity items in Question 9 was felt to represent several levels of generality, and some should be subsets of others.
- The rating of percent of effort devoted to various activities (Question 1) was felt to be very difficult to carry out, and it was suggested that there was a need for specifying either man hours or dollars
- The personnel categories on the employer questionnaire were not appropriate for federal employees and distinctions among the categories were not entirely clear.

- In general, respondents felt that a somewhat broader view of R-D-D-E and R-D-D-E personnel should be taken. This may have been due to their not having seen all of the work activity items, although they were informed that the list they saw was not meant to be comprehensive.

Cost data for the preparation and mailing of the questionnaires is provided in Appendix D.

REVISIONS RESULTING FROM THE PRETEST

The questionnaires were subjected to four or five revisions prior to the mail pretest. The early changes were based on conversations with questionnaire specialists at SRI and elsewhere and the reactions of school district and project personnel who were interviewed and asked to comment in detail on each of the questionnaire items. Most of the changes prior to the mail pretest had to do with the wording and format of the items with the aim of insuring that potential respondents would understand the instructions and the items and be able to give unambiguous responses to them. The areas to be covered were not changed during the preliminary revision phase.

Revisions to the Employer Questionnaire

A copy of the revised Employer Questionnaire is in Appendix C.

The cover letters were revised so as to be appropriate for the final survey rather than the pretest. A draft of an additional cover letter to be sent from The Bureau of Elementary and Secondary Education (BESE) or The National Center for Educational Statistics (NCES) to school districts, or from the project sponsoring organization of The National Center for Educational Research and Development (NCERD) or NCES to Project Directors were also prepared for use in obtaining cooperation from potential respondents. In the case of National Science Foundation or Office of Economic Opportunity sponsors the letter would come from them.

R-D-D-E activity descriptions were made more operational. Minor changes in identifying information were made also.

Each item in the mailout questionnaire will be described below, and any changes will be specified.

Pretest
Question
Number

Question 1 required an estimate of percent of effort devoted to a variety of activities. In the revised form the number of activities has been reduced, and those remaining are more closely centered around R-D-D-E. Response is now in terms of the four categories of "large", "moderate", "small" or "no part" of the effort instead of percentage estimates.

Question 2 concerning skills or sensitivities that have been difficult to find in recruiting is now Question 10, and it has been reworded slightly.

Question 3 concerning content area knowledge that has been difficult to find in recruiting is now Question 11, and it has been reworded slightly.

Question 4 concerning recruiting procedures used and their degrees of effectiveness is now Question 12.

Question 5 concerning selection techniques used and their degrees of effectiveness is now Question 13.

Question 6 concerning the number of employees in each of seven personnel categories and the respondents' and his organizations' requirements for each position is now Question 2. The previous categories were as follows:

- Director or principal investigator

  Full responsibility for a program or a large scale project

- Research and Development Associate

  Full responsibility for medium size and smaller projects

- Research and Development Assistant

  Responsibility under supervision for some part of a project such as for data collection and reduction

- Research and Development Intern

  Carries out assigned specific tasks under supervision

- Technician

  Carries out assigned specific tasks requiring limited technical skills under supervision

- Paraprofessional

  Carries out assigned specific tasks requiring little or no technical skill under supervision

- Clerical

The new categories are:

- Professional

  Substantial responsibility for carrying out project or unit tasks independently

- Paraprofessional

  Responsibility for carrying out project or unit tasks under moderate to heavy supervision, with little independence of action

- Technical

  Trained for and carries out specific project activities such as computer programming, audio-visual aid preparation or art work

- Clerical

  Routine typing, filing, numerical and other clerical tasks

The respondent is now asked only to provide the numbers of full-time and part-time employees and the number of full time equivalents. The requirements categories have been eliminated.

Question 7 concerning previous training for each personnel category has been eliminated.

Question 8 concerning varieties of in-house employee training used is now Question 7 and the request to indicate numbers of times used, percent of employees enrolled, time required, and course descriptions has been eliminated.

Question 9 concerning R-D-D-E activities in which employees needed training and desired training materials has been eliminated.

Question 10 concerning the value of various training approaches is now Question 8.

Question 11 concerning unfilled positions, losses, and personnel added is now Question 4. The personnel categories have been changed as in Question 2 on the final form.

Question 12 concerning anticipated hiring in the next two years is now Question 5. Personnel categories are as in Questions 2 and 4.

Question 13 concerning hiring if additional funding were available is now Question 6 and the increase in funding has been reduced from 50 to 25 percent.

Question 14 asking for a listing of personnel by name is now Question 3, and there is an additional requirement to specify either full time or the fraction of full time that was worked for each employee.

A rationale for each of the questionnaire items has been appended in addition.

The general effect of the revisions is to shorten the instrument and make the response task simpler and easier.

Revisions to the Employee Questionnaire

The revised Employee Questionnaire is in Appendix C.

The cover letter was revised so as to be appropriate for the final survey rather than the pretest. Additional assurances regarding confidentiality were included.

Minor changes in identifying information were made.

Each item in the mailout questionnaire will be described below, and any changes will be specified.

Pretest
Question
Number

Question 1 was the list of 31 activity items (10 common and 21 different on each of the four forms). Respondents were to indicate their degrees of involvement in each, the means by which they acquired the skills for each, and the extent of their felt need for training in each set of skills. This is now item 3. There is one form, and it includes only 25 of the items from the AERA list. Ten items are common to the original four lists. The remaining 15 were selected from the four lists. All have been reworded in much briefer form. Response requirements have also been simplified. We adopted the seven-point scale for degree of involvement in each activity that was devised by Teaching Research, a Division of the Oregon State System of Education on their General Position Activities Questionnaire. Interest in additional training is indicated by entering a "G", "S" or "N" for "great", "small", or "no interest" in additional training.

Question 2 concerning amount of education in each of 21 different areas or disciplines remains as Question 2.

Question 3 concerning amounts of postemployment training is now Question 4.

Question 4 concerning types of previous employers, numbers of years with them and relevance to present jobs is now Question 1.

Question 5 concerning skills that the respondent has but does not use in his present job has been eliminated.

Question 6 concerning extent of job satisfaction is now Question 7 and space for comment on reasons for satisfaction or dissatisfaction has been added.

Question 7 concerning extent of advancement possibilities is now Question 8 and space for listing reasons for estimates of advancement probabilities had been added.

Question 8 concerning value placed on various types of additional training is now Question 5.

Question 9 concerning degree of importance of college credit for additional training is now Question 6.

A rationale for each of the questionnaire items has been appended in addition.

The general effect of the revisions, as in the case of the employer form is to shorten the instrument, and make the response task simpler and easier.

RECOMMENDATIONS FOR THE CONDUCT OF THE FINAL SURVEY

Development interviews and pretest responses suggested a number of changes in procedure and questionnaire content that can be expected to contribute substantially to the success of the final survey.

The instruments were shortened and simplified so as to reduce the burden on respondents and to enhance the response rate.

In addition, however, in the final survey, it will be necessary to use procedures that will help to motivate recipients to respond, call for minimal time and effort consistent with acquiring the necessary data, provide for follow-up and analysis of non-respondent characteristics, and include in the school district sample only those districts for which there is reasonable assurance that R-D-D-E capabilities as they are defined for survey purposes do exist. In addition, personal contacts by telephone and, in some cases, in person may be required to help in motivating potential respondents to provide the needed data.

Specific recommendations are as follows:

- The survey should be carried out on a two-stage basis with project directors and school district unit leaders receiving the employer questionnaire and a request for a listing of professional and paraprofessional employees. The lists should be used by the survey contractor to select a sample to whom the employee questionnaires are sent. The procedure in which the respondent selects the sample from among his employees in accordance with instructions is subject to error or carelessness of unwillingness on the part of some respondents to undertake it. The two stage procedure was not fully carried out in the pretest because of time constraints. At least three months from the initial mailout date should be allowed for completion of both stages.

- If lists of personnel on federally funded projects can be obtained, the list for each project could be sent to the project director with the request that he correct it. This procedure would reduce the listing process to a minimum.
- Each School District Employer questionnaire should be accompanied by a cover letter from The Bureau of Elementary and Secondary Education (BESE) or National Center for Educational Statistics (NCES) asking for cooperation in the survey. Each project employer Questionnaire should be accompanied by a cover letter from NCES or the appropriate Office of Education, Office or Economic Opportunity, or National Science Foundation Division head.
- The content of the final survey questionnaires should be essentially as it now appears in the drafts included in this report. Some alterations may be desirable as the Oregon Studies (Teaching Research, Monmouth, Oregon) and AERA data are subjected to further analysis, since those surveys have covered work activities quite thoroughly.
- Before mailout, the final survey questionnaires should be put in booklet form, print size should be reduced, and both sides of each sheet used so as to reduce bulk as much as possible. Layout and margins should contribute to an attractive appearance, an uncluttered look and to ease of response.
- Questionnaire blanks should be precoded for punching and computer processing in accordnace with the processing and analysis plan to be used.

- A follow-up mailout to non-respondents should be undertaken in from two to three weeks after the initial mailout.
- An analysis of non-respondents should be undertaken in order to determine any differences from those who did respond.
- Mail questionnaire data should be supplemented by data from in person or telephone interviews conducted with a sample of 100-200 employers and employees. The interviews should explore in depth the areas included on the mail questionnaires, with particular emphasis on work activity patterns and training and experience requirements. Respondents are usually willing to give time for an interview, even when they may be quite unwilling to devote a lesser amount of time to filling out a questionnaire. Standardized interview guides should be prepared so as to insure comparability of information from interview to interview and to questionnaire data as well as easy summarizability of the interview materials themselves.
- The cooperation of the Association of Great City Schools should be enlisted in order to obtain its assistance in getting responses from the large school districts in which a substantial proportion of school system R-D-D-E personnel are employed.
- Federal employee responses should be obtained by interview, with the use of a specially designed interview guide since in general the type of monitoring activity going on in most Federal agencies does not lend itself to appropriate responses to the kinds of questions included in the basic questionnaires.

- State agencies have been surveyed exhaustively by The Institute for Educational Development. It appears that most of the information required from State levels can be obtained from their analyses and reports, and it is recommended that the final survey not include State agencies unless a need becomes apparent later.

Appendix A

AMERICAN EDUCATIONAL RESEARCH ASSOCIATION QUESTIONNAIRE ITEMS

Skills Necessary for Research

1. Drawing research implications from results of prior research studies.
2. Identifying and delineating significant researchable problems.
3. Procuring and/or managing resources (material and human) necessary to reach research objectives.
4. Interpreting, evaluating, and synthesizing relevant literature.
5. Formulating hypotheses or empirical questions to be answered by the study.
6. Specifying data or evidence necessary for a rigorous test of the hypothesis.
7. Identifying the population to which results should be generalized and a sample representative of that population, using appropriate sampling techniques to draw the sample.
8. Formulating alternative generalizations from predicted research outcomes.
9. Identifying appropriate research methods.
10. Understanding experimental, quasi-experimental, and other systematic approaches to inquiry, and drawing on such knowledge in designing a research study appropriate to the problem under consideration.
11. Applykng the research design, recognizing, explicating and controlling threats to validity.
12. Identifying classes of behavioral outcomes for measurement.
13. Choosing specific variables and treatments (where appropriate) to be used.
14. Selecting appropriate techniques of measurement.
15. Developing measuring instruments.
16. Assessing the validity of outcome measures.
17. Using a variety of data-gathering methods (tests, interviews, analysis of documents, etc.).
18. Organizing data for analysis.
19. Understanding the general role, types, and assumptions underlying various statistical techniques, and drawing on such knowledge in selecting and using appropriate techniques of data analysis.
20. Using aids in data analyses, such as computer processing.
21. Interpreting and drawing appropriate conclusions and implications from data analyses.
22. Formulating statements of a theory that offers an explanation(cause-effect relationship) of the behavior under study.
23. Reporting research findings and implications, orally and in writing.

Skills Necessary for Research-based Development (Including Product Testing)

1. Interpreting information concerning education goals
2. Drawing on research results in planning developmental activities.
3. Conceptualizing systems, their elements, and interrelations among these elements.
4. Specifying desired performance outcomes (objectives) of instruction.
5. Devising techniques to identify entry capabilities of learners.
6. Identifying alternative instructional and media techniques.
7. Determining appropriate sequences of topics in instruction.
8. Describing the product to be developed.
9. Composing effective oral and written forms of instructional communications.
10. Directing the work of production personnel.
11. Selecting or devising appropriate techniques for measuring outcomes.
12. Designing and managing initial laboratory tests of developed techniques and materials.
13. Designing and managing field tryouts and tests.
14. Reporting evaluation of outcomes.
15. Interpreting evaluation findings.
16. Specifying requirements for revision based upon outcome evaluations.

Skills Necessary for Diffusion

Dissemination

1. Defining and analyzing characteristics of target group(s)
2. Selecting from all available information about developed packages that which can be most effectively disseminated.
3. Selecting the most effective dissemination vehicles to convey information to target groups.
4. Composing the information, within a chosen format, for accurate and pervasive dissemination.
5. Implementing actual dissemination, including the direction of technical production personnel
6. Designing and implementing techniques for evaluating the effectiveness of the dissemination effort.

Demonstration

1. Specifying nature of the demonstration.
2. Selecting appropriate setting and personnel for demonstration.
3. Managing and coordinating the demonstration effort.
4. Evaluating the effectiveness of the demonstration.

Facilitating Adoption

1. Identifying features of the adopting organization or system which differ from those in which the product was developed and tested.
2. Designing modifications of the product to fit the adopting organization or system, when necessary.
3. Designing procedures for modifying the adopting system or organization to fit the product, when necessary, including the design of needed training programs.
4. Identifying potential barriers to implementation.
5. Devising and conducting long-range evaluation of the installed package.

Skills Necessary for Context Evaluation/Situations Analysis

1. Identifying goals of the system.
2. Assessing the social relevance of those goals.
3. Identifying values that are implicit in the system goals.
4. Identifying the nature of the standards or norms the decision-makers will apply in interpreting the relevant data which may be provided.
5. Clarifying and explicating desired outcomes of the system.
6. Measuring current actual outcomes of the system through techniques such as:
    a. demographic analysis
    b. economic analysis
    c. psychometric analysis
    d. systems analysis
    e. observational techniques
7. Comparing actual and intended system outcomes to identify discrepancies (needs) which exist in the system.
8. Explicating the problems that create the needs and diagnosing the causes of these problems.
9. Helping system personnel to develop objectives which, if attained, will satisfy the needs or solve the problems identified above.
10. Designing a monitoring system that will provide continual data (of the type above) on the status of the operating system.

Skills Necessary for Process Evaluation/Program Monitoring

1. Designing and selecting indicators of progress in educational programs.
2. Monitoring the programs to detect deviations from design or specified procedures through techniques such as unobtrusive measures, systems analysis, and observational techniques.
3. Anticipating predicted barriers and remaining alert to unanticipated problems that threaten the success of the program.
4. Providing immediate feedback to program operators for their possible use in making decisions about modifications of the plan, procedures, or resource allocations.
5. Perceiving human relation problems that threaten the success of the program.

Skills Necessary for Outcome Evaluation

1. Applying appropriate designs to evaluation studies.
2. Developing general criteria and designing data collection procedures for application in measuring the effectiveness and efficiency of existing innovative practices and products, i.e., minimum standards and outcomes which indicate successful utilization of practices and products.
3. If necessary, translating objectives into behavioral terms.
4. Identifying situations in which the designated behavior can be observed and recorded.
5. Establishing standards or norms for judging whether objectives have been attained.
6. Selecting (or developing) and using techniques of measurement to yield information relevant to these standards.
7. Assessing the validity of outcome measures.
8. Collecting and organizing the data preparatory to analysis.
9. Selecting an appropriate technique to analyze the data.
10. Analyzing the evidence yielded by the evaluation.
11. Judging the strengths and weaknesses of the plans and procedures employed for meeting the project objectives.
12. Deciding how to explain the outcome as a function of plans, procedures, and resources.
13. Deciding what recommendations to make as a result of the outcomes.
14. Estimating the potential impact of the outcomes on the problem area being served.
15. Providing sufficient information to the decision-maker to enable him to decide whether to continue, modify, or terminate the activity or process evaluated.
16. Specifying changes that need to be made in the context evaluation system due to decisions about program continuation.

Skills Necessary for Program Planning/Input Analysis

1. Helping system personnel to apply criteria to lists of possible objectives in order to select those which are feasible within constraints of the operating context.
2. Helping system personnel to establish priorities for the selected objectives.
3. Identifying and rating alternative strategies for attaining the selected objectives.
4. Identifying and rating available resources (human, material, and financial) and/or potential sources of support.
5. Selecting a strategy for implementation.
6. Selecting a source of support or the available resources which will be used to implement the program.
7. Predicting the potential barriers to success in the proposed course of action and judging the potential of the strategy for overcoming the estimated procedural barriers.
8. Identifying alternative tactics to implement selected strategy and choose those that seem most likely to succeed.

Appendix B

PRETEST EMPLOYER AND EMPLOYEE QUESTIONNAIRES

STUDY OF EDUCATIONAL RESEARCH, DEVELOPMENT, DIFFUSION, AND EVALUATION PERSONNEL TRAINING REQUIREMENTS

The Far West Laboratory for Educational Research and Development is developing a design for a study of training and personnel requirements of employers and employees engaged in educational research, development, diffusion, and evaluation (R-D-D-E). The intent of the study is to develop and justify more effective plans for the development and support of federally sponsored programs designed to respond to requirements for trained personnel (and training capabilities) in educational R-D-D-E. A "base-line" study, national in scope, technically adequate in design, and addressing itself to priority information requirements is needed.

In order to reduce the burden of response, sampling survey methods will be used to select a limited number of educational agencies and federally sponsored projects. We have selected your agency or project to pilot test the employer questionnaire. We are also requesting your cooperation in helping us to randomly sample the professional and paraprofessional staff in your agency or project who are engaged in educational R-D-D-E work, so that we may pilot test the employee questionnaires. Copies are enclosed for your examination. There are several alternate forms which have been designed to cover a wide range of R-D-D-E activities, without overburdening individual employees. All data on employers and employees will be treated confidentially and will be analyzed and reported only by aggregates (e.g. size of funding, type of R-D-D-E work, etc.).

Because relevant, accessible training programs and training materials are important to both employers and employees, we earnestly request your full cooperation. We are especially interested in your questions or comments which may help to improve the questionnaires.

Please write on the questionnaires themselves, enclose additional written comments and questions, or call Dr. Carl Rittenhouse at Stanford Research Institute, Area Code 415, 326-6200, Extension 3367.

PLEASE FILL OUT THIS QUESTIONNAIRE AS SOON AS YOU RECEIVE IT AND RETURN IT TO US IMMEDIATELY UPON COMPLETION.

Definition of Educational Research

Educational Research is defined as a set of coordinated activities which produce reliable knowledge that can stand the test of empirical verification regarding new facts, principles, generalizations, theories, and laws. It employs the procedures of problem stating, design, measurement and analysis that permit known degrees of generalizability of findings, and that permit also replication for purposes of verification.

Definition of Educational Development

Educational Development is defined as the systematic use of research-based generalizations to create new educational methods, systems, materials, or devices which have practical utility. Included in development are the design and production of prototype processes and materials and also pilot trials to test their feasibility and to gather ideas for their improvement. Development may be used to generate new curriculum materials, new teaching techniques, new types of media, new ways of assigning pupils to schools, new architectural designs and so on.

Definition of Educational Diffusion

Educational Diffusion involves procedures which communicate about, or create, the necessary conditions for the adoption and utilization of products which derive from educational research and development.

Definition of Educational Evaluation

Educational Evaluation is defined by those activities that are necessary for determining the effectiveness of educational programs, products or procedures. In its most rigorous form, evaluation will be concerned with obtaining objective measures of effectiveness under highly defined conditions, with the ultimate judgment to be made against standards or pre-established criteria. However, other procedures also may be used that yield informal measures such as collected opinions and ratings that will form the basis of evaluation.

Definition of Educational Planning & Analysis

Educational Planning & Analysis includes those activities through which the goals of a system are defined and for which objectives are established that are considered to be feasible within operating constraints. Objectives are prioritized and the best available strategy is determined for their attainment. Expected versus actual outcomes may be evaluated by such rigorous techniques as economic, systems or psychometric analysis; or, observational techniques may be used also Discrepancies arising may be treated by problem diagnosis in order to remove blocks to expected outcomes; or, feedback is provided to original planning to adjust preestablished objectives.

11-10-71

QUESTIONNAIRE A

Training and Personnel Requirements

R-D-D-E (Supervisor Questionnaire)

Name of School District ______________________________

____

Name of Respondent ______________________________

Name of Unit Supervised
by Respondent ______________________________

____

Position Title of Respondent ______________________________

____

Address ______________________________

____

Telephone ______________________________

Please describe briefly the kinds of projects in which you typically engage and the major functions your unit performs in the school district.

____

____

____

____

____

____

____

Place a checkmark beside the type of organization in which the project resides:

_______ Educational R&D Center

_______ Regional Educational Laboratory

_______ College, School of Education, Dept. or other university office

_______ Private non-profit organization

_______ Industry or commercial organization

_______ Public School or School District

_______ State Department of Education

_______ Professional Association

_______ Agency of Federal Government, Specify department_______________

____

_______ Other (specify)_______________

____

Approximate level of project funding from all sources for current fiscal year $_______________

Approximate level of project funding from all sources for last fiscal year $_______________

Anticipated level of project funding from all sources next fiscal year

$_______________

Approximate percent of current fiscal year project funds from:

_______% U.S. Office of Education
_______% Office of Economic Opportunity
_______% National Science Foundation
_______% Other federal agencies (specify)_______________
_______% State (specify)_______________
_______% Private Foundation
_______% Local School District
_______% Industry
_______% Other (specify)_______________

PLEASE ASSURE THAT ABOVE PERCENTAGES ADD TO 100%.

1. In order to classify your project, which may involve several educational research, development, diffusion, evaluation or related planning and management tasks, please estimate the percent of current fiscal year project or unit effort which is being expended in the following areas. Show 0% if no effort in a given activity. Please read all items before answering.

1. __________ Conducting basic scientific inquiry related to educational problems.
2. __________ Conducting applied research studies directly related to educational problems.
3. __________ Investigating and assessing educational needs and requirements.
4. __________ Gathering and providing information for program planning and design.
5. __________ Locating and evaluating programs or procedures that may provide solutions to operating problems.
6. __________ Selecting, adapting or inventing solutions to operating problems.
7. __________ Developing prototypic packages (innovative solutions and programs) for educational programs.
8. __________ Testing and evaluating innovative solutions and programs.
9. __________ Revising and refining prototypic packages on the basis of test and evaluation information.
10. __________ Creating widespread awareness of tested solutions and programs.
11. __________ Demonstrating effectiveness of solutions and programs to target audiences.
12. __________ Training target audiences in the use of solutions and programs.
13. __________ Monitoring and adjusting solutions and programs after or during widespread installation.
14. __________ Planning and programming any of the above activities.

15. __________ Managing and supervising any of the above activities.

16. __________ Securing funding for, financially planning, and accounting for resources and expenditures of any of the above.

17. __________ Preparing reports, documentation, etc., on any of the above.

18. __________ Other (specify ____

__________ ____

__________ ____

19. __________ Training project/agency personnel to perform any of the above. Please list numbers of activities above to which training applies

____

20. __________ Training other than project/agency personnel to perform any of the above. Please list numbers of activities above to which training applies: __________

Please also specify type of personnel: ______________________

____

PLEASE ASSURE THAT ABOVE PERCENTAGES ADD TO 100%.

2. Are there skills or sensitivities that have been particularly difficult to find in recruiting? Please describe.

3. Have you had difficulty in recruiting personnel with qualifications in specific content areas such as early childhood education, minority education, remedial reading, vocational education or others? Please specify areas.

4. Listed below are a number of recruiting procedures. First, place a checkmark in the left hand column by those you have used. Next, for each one that is checked, indicate degree of effectiveness by placing a checkmark in the appropriate column.

		Effectiveness of recruiting procedures		
Recruiting Procedures	Have Used	Minimally Effective	Moderately Effective	Very Effective
A. Journal or newspaper advertising	____	____	____	____
B. Professional meeting employment services	____	____	____	____
C. Referral by other employees	____	____	____	____
D. Colleges and university employment services	____	____	____	____
E. Informal survey of professional colleagues	____	____	____	____
F. Review of unsolicited applications	____	____	____	____
G. Recruitment from within	____	____	____	____
H. Other(specify)______ ____________________	____	____	____	____

5. Listed below are a number of selection techniques. First, place a checkmark in the left hand column by each technique you have used. Next, for each one that is checked, indicate degree of effectiveness by placing checkmark in the appropriate column.

Selection Techniques	Have Used	Effectiveness of Selection Techniques: Minimally Effective	Moderately Effective	Very Effective
A. Interviews	____	____	____	____
B. Tests	____	____	____	____
C. Application blanks	____	____	____	____
D. References	____	____	____	____
E. Work samples	____	____	____	____
F. Other (specify) ____________	____	____	____	____

Please comment on any special problems in using the selection techniques.

6. Below is a list of personnel categories arranged by level of responsibility.

Director or principal investigator
Full responsibility for a program or a large scale project

Research and Development Associate
Full responsibility for medium size and smaller projects

Research and Development Assistant
Responsibility under supervision for some part of a project, such as for data collection and reduction

Research and Development Intern
Carries out assigned specific tasks under supervision

Technician
Carries out assigned specific tasks requiring little or no technical skill under supervision

Clerical

Please complete the table below in accordance with the following instructions:

Under Section A, indicate in the appropriate columns the number of individuals you employ and the number of full time equivalent (FTE) employees represented by those individuals. If none, write 0 in the space.

Under Section B, indicate what in your opinion should be the minimum combination of education and experience requirements for each category by degree and by years of experience.

Under Section C, place a checkmark (✓) opposite those categories for which your organization has established formal education and experience requirements. Then, for those you have checked, describe the requirements (e.g., Program Associate - minimum of Master's degree and 3 years of experience, and so forth) in the space provided below.

	Section A		Section B		Section C
	Employees		Requirements in your Opinion		Organizational Requirements
Personnel Categories	Number Employed	FTE	Degree	Years of Experience	Formal Requirements
Director and Principal Investigator	____	____	____	____	____
R&D Associate	____	____	____	____	____
R&D Assistant	____	____	____	____	____
R&D Intern	____	____	____	____	____
R&D Technician	____	____	____	____	____
R&D Paraprofessional	____	____	____	____	____
Clerical	____	____	____	____	____

For describing formal requirements under Section C instructions. ____________

____

____

7. How adequately has the previous training or experience of your employees prepared them for their present assignments? Place a checkmark (✓) opposite each personnel category and in the appropriate column that reflects your judgment of past experience or training.

	Adequacy of Previous Training and Experience				
Personnel Categories	Highly Inadequate	Inadequate	Undecided	Adequate	Highly Adequate
R&D Associate	___	___	___	___	___
R&D Assistant	___	___	___	___	___
R&D Intern	___	___	___	___	___
R&D Technician	___	___	___	___	___
R&D Paraprofessional	___	___	___	___	___
Clerical	___	___	___	___	___

8. Listed below are several kinds of in-house employee training. Check those you have used during the past year.

In-house Employee Training	Used During Past Year
A. Special supervised OJT or internship	______
B. One to two week short courses	______
C. One to five day seminars or institutes	______
D. Longer courses	______
E. Other (specify) ______________________________ ______________________________	______

For those you checked above, briefly indicate the number of times it was offered, the percent of your employees who were enrolled, the time required and a description of the content including course titles if possible (e.g., two week course in Tests and Measurements, 3 hours per day, 25% of the staff enrolled, offered 4 times during past year). ____

____

____

____

____

____

9. Listed below are 30 activities that are performed in educational R-D-D-E. Under Section A, indicate the need for additional training for your employees. Place a checkmark in the appropriate column opposite each activity. Under Section B, identify five activities for which you would like to have programmed instruction or other self-study materials developed. Next, rank the five activities you have selected from "1" to "5", with Rank "1" going to the one with your highest preference, Rank "2" to your next highest preference and so forth.

	Need for Training			Materials Desired
	Section A			Section B
Educational R-D-D-E Activities	Little or no need	Moderate need	Great need	Rank of activities for which training materials are desired
1. Interpreting, evaluating and synthesizing relevant literature	___	___	___	___
2. Identifying and delineating significant researchable problems	___	___	___	___
3. Choosing specific research variables and treatments (where appropriate) to be used	___	___	___	___
4. Developing measuring instruments	___	___	___	___
5. Using a variety of data-gathering methods (tests, interviews, analysis of documents, etc.)	___	___	___	___
6. Organizing data for analysis	___	___	___	___
7. Understanding the general role, types, and assumptions underlying various statistical techniques, and drawing on such knowledge in selecting and using appropriate techniques of data analysis	___	___	___	___

	Need for Training			Materials Desired
	Section A			Section B
Educational R-D-D-E Activities	Little or no need	Moderate need	Great need	Rank of activities for which training materials are desired
8. Using aids in data analysis, such as computer processing	___	___	___	___
9. Interpreting and drawing appropriate conclusions and implications from data analyses	___	___	___	___
10. Reporting research findings and implications, orally and in writing	___	___	___	___
11. Specifying desired performance outcomes (objectives) of instruction	___	___	___	___
12. Describing a product to be developed	___	___	___	___
13. Designing and managing field tryouts and tests	___	___	___	___
14. Specifying requirements for product revision based upon outcome evaluation	___	___	___	___
15. Selecting the most effective dissemination vehicles to convey information to target groups	___	___	___	___
16. Composing the information, within a chosen format, for accurate and pervasive dissemination	___	___	___	___

	Need for Training			Materials Desired
	Section A			Section B
Educational R-D-D-E Activities	Little or no need	Moderate need	Great need	Rank of activities for which training materials are desired
17. Implementing actual dissemination, including the direction of technical production personnel	___	___	___	___
18. Identifying goals of an educational system	___	___	___	___
19. Clarifying and explicating desired outcomes of an educational system	___	___	___	___
20. Comparing actual and intended educational system outcomes to identify discrepancies (needs) which exist in the system	___	___	___	___
21. Designing a monitoring system that will provide continual data on the status of an operating educational system	___	___	___	___
22. Helping educational system personnel to establish priorities for selected system objectives	___	___	___	___
23. Identifying and rating alternative strategies for attaining selected educational system objectives	___	___	___	___
24. Identifying and rating available educational program resources (human, material and financial) and/or potential sources of support	___	___	___	___
25. Writing proposals for research, development, dissemination and/or evaluation projects	___	___	___	___

Educational R-D-D-E Activities	Need for Training			Materials Desired
	Section A			Section B
	Little or no need	Moderate need	Great need	Rank of activities for which training materials are desired
26. Monitoring educational programs to detect deviations from design or specifiied procedures through techniques such as unobtrusive measures, systems analysis, and observational techniques	___	___	___	___
27. Developing general criteria and designing data collection procedures for application in measuring the effectiveness and efficiency of existing innovative practices and products, i.e., minimum standards and outcomes which indicate successful utilization of practices and products	___	___	___	___
28. If necessary, translating program objectives into behavioral terms	___	___	___	___
29. Establishing standards or norms for judging whether objectives have been attained	___	___	___	___
30. Selecting (or developing) and using techniques of measurement to yield information relevant to standards to be used	___	___	___	___

10. How much value do you place on the following training approaches for current employees? Place a check mark in the appropriate "value" column

	Value of Approach		
Training Approaches	Little or no value	Moderate Value	Great Value
A. Three to five day institutes or seminars	____	____	____
B. Longer institutes	____	____	____
C. One to two week short courses	____	____	____
D. Longer courses	____	____	____
E. Internships in other agencies	____	____	____
F. Correspondence courses	____	____	____
G. Extension or other course arrangements with colleges or universities on a released time basis	____	____	____
H. Extension or other course arrangements with colleges or universities on an employee's own time	____	____	____
I. Other (specify)______________________	____	____	____

11. Indicate for each personnel category the number of currently unfilled positions, the number of losses in the last year and the number of personnel added in the last year. (If none, write "none" opposite the appropriate category.)

Personnel Categories	Number current unfilled positions	Number losses in last year	Number additions in last year
Director and Principal Investigator	_____	_____	_____
R&D Associate	_____	_____	_____
R&D Assistant	_____	_____	_____
R&D Intern	_____	_____	_____
R&D Technician	_____	_____	_____
R&D Paraprofessional	_____	_____	_____
Clerical	_____	_____	_____

Indicate major reasons for current vacancies, if any. ________________________

____

Indicate major reasons for losses, if any. ____________________________

____

Indicate major reasons for additions, if any. ___________________________

____

12. How many employees do you anticipate hiring in the next two years for each of the following levels? (If none, write "none" opposite the appropriate category).

Personnel Categories	Number to be Hired
Director and principal investigator	______
R&D Associate	______
R&D Assistant	______
R&D Intern	______
R&D Technician	______
R&D Paraprofessional	______
Clerical	______

13. If your funding were to be increased by half (50% more than current funding) in the next year:

A. How many people would you need in addition to present staff and at what levels? (e.g., "3 R&D associates") ______________________________

____

B. What kinds of skills would they represent? (e.g., proposal writing, statistical analysis) ______________________________

____

14. Please list alphabetically all the personnel except clerical who work in the unit or on the project. Then follow the steps discussed on the following page for selecting personnel who will complete Questionnaire B.

PLEASE USE THE LAST PAGE TO COMMENT ON THE QUESTIONNAIRE

PROCEDURE FOR SELECTING QUESTIONNAIRE B RESPONDENTS

After you have listed all personnel with the exception of those in clerical positions, four individuals should be chosen who will complete the Form B (Employee) Questionnaires. In order that a random group will be chosen, we ask that you follow the procedure shown below.

Step #1 Starting with Number 1 for the first name on the list, number all remaining names consecutively.

Step #2 Divide your total number of employees by four. This will give you a quotient, and a remainder in some instances.

Step #3 Use the remainder as a means of locating the first individual to be selected, i.e., if the remainder is 3, count down to the third individual from the top of the list.

Step #4 Use the quotient to select the remaining three people, i.e., if the quotient is two, take every second person after the initial person has been selected according to Step #3. In this case you would continue selecting every second person until three have been identified.

If you have four, or a lesser number on your staff, then all of them would be requested to complete the questionnaire.

For Example:

Example #1

Staff size of 13 divided by four equals a quotient of 3, remainder of 1.

With a remainder of 1, the first name on the list is chosen initially. With a quotient of 3, count down to the third name below the one already chosen, or name #4 on the list. Continue taking every third name until a total of four have been selected.

Example #2

Staff size of 6 divided by 4 equals a quotient of 1, remainder of 2.

As the first step, select the second name on the list. Thereafter, take the next three consecutive names, since the quotient equals 1.

PLEASE USE THE LAST PAGE TO COMMENT ON THE QUESTIONNAIRE

Comments on the Questionnaire

Since this questionnaire is being tested before preparation in its final form for use throughout the country with educational R-D-D-E personnel, your comments on its content and format are as valuable as the responses you have made. Please comment as frankly as you desire.

For each comment, please reference the page and item number so that we can make the appropriate changes (e.g., page____, item____, "could not understand the meaning of activity #__________"; or, page____, item____, "could not understand what I was supposed to do", and so on.

STUDY OF EDUCATIONAL RESEARCH, DEVELOPMENT, DIFFUSION, AND EVALUATION PERSONNEL TRAINING REQUIREMENTS

The Far West Laboratory for Educational Research and Development is developing a design for a study of training and personnel requirements of employers and employees engaged in educational research, development, diffusion, and evaluation (R-D-D-E). The intent of the study is to develop and justify more effective plans for the development and support of federally sponsored programs designed to respond to requirements for trained personnel (and training capabilities) in educational R-D-D-E. A "base-line" study, national in scope, technically adequate in design, and addressing itself to priority information requirements is needed.

In order to reduce the burden of response, sampling survey methods will be used to select a limited number of educational agencies and federally sponsored projects. We have selected your agency or project to pilot test the employer questionnaire. We are also requesting your cooperation in helping us to randomly sample the professional and paraprofessional staff in your agency or project who are engaged in educational R-D-D-E work, so that we may pilot test the employee questionnaires. Copies are enclosed for your examination. There are several alternate forms which have been designed to cover a wide range of R-D-D-E activities, without overburdening individual employees. All data on employers and employees will be treated confidentially and will be analyzed and reported only by aggregates (e.g. size of funding, type of R-D-D-E work, etc.).

Because relevant, accessible training programs and training materials are important to both employers and employees, we earnestly request your full cooperation. We are especially interested in your questions or comments which may help to improve the questionnaires.

Please write on the questionnaires themselves, enclose additional written comments and questions, or call Dr. Carl Rittenhouse at Stanford Research Institute, Area Code 415, 326-6200, Extension 3367.

PLEASE FILL OUT THIS QUESTIONNAIRE AS SOON AS YOU RECEIVE IT AND RETURN IT TO US IMMEDIATELY UPON COMPLETION.

Definition of Educational Research

Educational Research is defined as a set of coordinated activities which produce reliable knowledge that can stand the test of empirical verification regarding new facts, principles, generalizations, theories, and laws. It employs the procedures of problem stating, design, measurement and analysis that permit known degrees of generalizability of findings, and that permit also replication for purposes of verification.

Definition of Educational Development

Educational Development is defined as the systematic use of research-based generalizations to create new educational methods, systems, materials, or devices which have practical utility. Included in development are the design and production of prototype processes and materials and also pilot trials to test their feasibility and to gather ideas for their improvement. Development may be used to generate new curriculum materials, new teaching techniques, new types of media, new ways of assigning pupils to schools, new architectural designs and so on.

Definition of Educational Diffusion

Educational Diffusion involves procedures which communicate about, or create, the necessary conditions for the adoption and utilization of products which derive from educational research and development.

Definition of Educational Evaluation

Educational Evaluation is defined by those activities that are necessary for determining the effectiveness of educational programs, products or procedures. In its most rigorous form, evaluation will be concerned with obtaining objective measures of effectiveness under highly defined conditions, with the ultimate judgment to be made against standards or pre-established criteria. However, other procedures also may be used that yield informal measures such as collected opinions and ratings that will form the basis of evaluation.

Definition of Educational Planning & Analysis

Educational Planning & Analysis includes those activities through which the goals of a system are defined and for which objectives are established that are considered to be feasible within operating constraints. Objectives are prioritized and the best available strategy is determined for their attainment. Expected versus actual outcomes may be evaluated by such rigorous techniques as economic, systems or psychometric analysis; or, observational techniques may be used also. Discrepancies arising may be treated by problem diagnosis in order to remove blocks to expected outcomes; or, feedback is provided to original planning to adjust preestablished objectives.

11-10-71

QUESTIONNAIRE A

Training and Personnel Requirements

R-D-D-E (Project Director Questionnaire)

Project Title ______________________________

Project Director ______________________________

Position Title ______________________________

Address ______________________________

____

Telephone ______________________________

Agency Receiving Contract or Grant ______________________________

Agency Director and Title ______________________________

____

Address ______________________________

____

Telephone ______________________________

Sponsoring/Funding Agency ______________________________

Agency Department ______________________________

Project Officer ______________________________

Primary Project Objective ______________________________

____

Starting Date of Project ______________________________

Ending Date of Project ______________________________

Place a checkmark beside the type of organization in which the project resides:

_______ Educational R&D Center

_______ Regional Educational Laboratory

_______ College, School of Education, Dept. or other university office

_______ Private non-profit organization

_______ Industry or commercial organization

_______ Public School or School District

_______ State Department of Education

_______ Professional Association

_______ Agency of Federal Government, Specify department _______________

____

_______ Other (specify) _______________

____

Approximate level of project funding from all sources for current fiscal year $_______________

Approximate level of project funding from all sources for last fiscal year $_______________

Anticipated level of project funding from all sources next fiscal year

$_______________

Approximate percent of current fiscal year project funds from:

___________% U.S. Office of Education

___________% Office of Economic Opportunity

___________% National Science Foundation

___________% Other federal agencies (specify) _______________

___________% State (specify) _______________

___________% Private Foundation

___________% Local School District

___________% Industry

___________% Other (specify) _______________

PLEASE ASSURE THAT ABOVE PERCENTAGES ADD TO 100%.

1. In order to classify your project, which may involve several educational research, development, diffusion, evaluation or related planning and management tasks, please estimate the percent of current fiscal year project or unit effort which is being expended in the following areas. Show 0% if no effort in a given activity. Please read all items before answering.

1. ________ Conducting basic scientific inquiry related to educational problems.
2. ________ Conducting applied research studies directly related to educational problems.
3. ________ Investigating and assessing educational needs and requirements.
4. ________ Gathering and providing information for program planning and design.
5. ________ Locating and evaluating programs or procedures that may provide solutions to operating problems.
6. ________ Selecting, adapting or inventing solutions to operating problems.
7. ________ Developing prototypic packages (innovative solutions and programs) for educational programs.
8. ________ Testing and evaluating innovative solutions and programs.
9. ________ Revising and refining prototypic packages on the basis of test and evaluation information.
10. ________ Creating widespread awareness of tested solutions and programs.
11. ________ Demonstrating effectiveness of solutions and programs to target audiences.
12. ________ Training target audiences in the use of solutions and programs.
13. ________ Monitoring and adjusting solutions and programs after or during widespread installation.
14. ________ Planning and programming any of the above activities.

15. ________ Managing and supervising any of the above activities.

16. ________ Securing funding for, financially planning, and accounting for resources and expenditures of any of the above.

17. ________ Preparing reports, documentation, etc., on any of the above.

18. ________ Other (specify ____

________ ____

________ ____

19. ________ Training project/agency personnel to perform any of the above. Please list numbers of activities above to which training applies

____

20. ________ Training other than project/agency personnel to perform any of the above. Please list numbers of activities above to which training applies: ____________

Please also specify type of personnel: ____________________

____

PLEASE ASSURE THAT ABOVE PERCENTAGES ADD TO 100%.

2. Are there skills or sensitivities that have been particularly difficult to find in recruiting? Please describe.

3. Have you had difficulty in recruiting personnel with qualifications in specific content areas such as early childhood education, minority education, remedial reading, vocational education or others? Please specify areas.

4. Listed below are a number of recruiting procedures. First, place a checkmark in the left hand column by those you have used. Next, for each one that is checked, indicate degree of effectiveness by placing a checkmark in the appropriate column.

		Effectiveness of recruiting procedures		
Recruiting Procedures	Have Used	Minimally Effective	Moderately Effective	Very Effective
A. Journal or newspaper advertising	____	____	____	____
B. Professional meeting employment services	____	____	____	____
C. Referral by other employees	____	____	____	____
D. Colleges and university employment services	____	____	____	____
E. Informal survey of professional colleagues	____	____	____	____
F. Review of unsolicited applications	____	____	____	____
G. Recruitment from within	____	____	____	____
H. Other(specify)_______ ____________________	____	____	____	____

5. Listed below are a number of selection techniques. First, place a checkmark in the left hand column by each technique you have used. Next, for each one that is checked, indicate degree of effectiveness by placing checkmark in the appropriate column.

Selection Techniques	Have Used	Effectiveness of Selection Techniques		
		Minimally Effective	Moderately Effective	Very Effective
A. Interviews	____	____	____	____
B. Tests	____	____	____	____
C. Application blanks	____	____	____	____
D. References	____	____	____	____
E. Work samples	____	____	____	____
F. Other (specify) ____________	____	____	____	____

Please comment on any special problems in using the selection techniques.

6. Below is a list of personnel categories arranged by level of responsibility.

- Director or principal investigator
  Full responsibility for a program or a large scale project
- Research and Development Associate
  Full responsibility for medium size and smaller projects
- Research and Development Assistant
  Responsibility under supervision for some part of a project, such as for data collection and reduction
- Research and Development Intern
  Carries out assigned specific tasks under supervision
- Technician
  Carries out assigned specific tasks requiring limited technical skills under supervision
- Paraprofessional
  Carries out assigned specific tasks requiring little or no technical skill under supervision
- Clerical

Please complete the table below in accordance with the following instructions:

- Under Section A, indicate in the appropriate columns the number of individuals you employ and the number of full time equivalent (FTE) employees represented by those individuals. If none, write 0 in the space.
- Under Section B, indicate what in your opinion should be the minimum combination of education and experience requirements for each category by degree and by years of experience.
- Under Section C, place a checkmark (✓) opposite those categories for which your organization has established formal education and experience requirements. Then, for those you have checked, describe the requirements (e.g., Program Associate - minimum of Master's degree and 3 years of experience, and so forth) in the space provided below.

	Section A		Section B		Section C
	Employees		Requirements in your Opinion		Organizational Requirements
Personnel Categories	Number Employed	FTE	Degree	Years of Experience	Formal Requirements
Director and Principal Investigator	___	___	___	___	___
R&D Associate	___	___	___	___	___
R&D Assistant	___	___	___	___	___
R&D Intern	___	___	___	___	___
R&D Technician	___	___	___	___	___
R&D Paraprofessional	___	___	___	___	___
Clerical	___	___	___	___	___

For describing formal requirements under Section C instructions. ____________

____

____

7. How adequately has the previous training or experience of your employees prepared them for their present assignments? Place a checkmark (✓) opposite each personnel category and in the appropriate column that reflects your judgment of past experience or training.

Personnel Categories	Adequacy of Previous Training and Experience				
	Highly Inadequate	Inadequate	Undecided	Adequate	Highly Adequate
R&D Associate	___	___	___	___	___
R&D Assistant	___	___	___	___	___
R&D Intern	___	___	___	___	___
R&D Technician	___	___	___	___	___
R&D Paraprofessional	___	___	___	___	___
Clerical	___	___	___	___	___

8. Listed below are several kinds of in-house employee training. Check those you have used during the past year.

In-house Employee Training	Used During Past Year
A. Special supervised OJT or internship	______
B. One to two week short courses	______
C. One to five day seminars or institutes	______
D. Longer courses	______
E. Other (specify) ______________________________	______

For those you checked above, briefly indicate the number of times it was offered, the percent of your employees who were enrolled, the time required and a description of the content including course titles if possible (e.g., two week course in Tests and Measurements, 3 hours per day, 25% of the staff enrolled, offered 4 times during past year). ______________________________

9. Listed below are 30 activities that are performed in educational R-D-D-E. Under Section A, indicate the need for additional training for your employees. Place a checkmark in the appropriate column opposite each activity. Under Section B, identify five activities for which you would like to have programmed instruction or other self-study materials developed. Next, rank the five activities you have selected from "1" to "5", with Rank "1" going to the one with your highest preference, Rank "2" to your next highest preference and so forth.

	Need for Training			Materials Desired
	Section A			Section B
Educational R-D-D-E Activities	Little or no need	Moderate need	Great need	Rank of activities for which training materials are desired
1. Interpreting, evaluating and synthesizing relevant literature	___	___	___	___
2. Identifying and delineating significant researchable problems	___	___	___	___
3. Choosing specific research variables and treatments (where appropriate) to be used	___	___	___	___
4. Developing measuring instruments	___	___	___	___
5. Using a variety of data-gathering methods (tests, interviews, analysis of documents, etc.)	___	___	___	___
6. Organizing data for analysis	___	___	___	___
7. Understanding the general role, types, and assumptions underlying various statistical techniques, and drawing on such knowledge in selecting and using appropriate techniques of data analysis	___	___	___	___

	Need for Training			Materials Desired
	Section A			Section B
Educational R-D-D-E Activities	Little or no need	Moderate need	Great need	Rank of activities for which training materials are desired
8. Using aids in data analysis, such as computer processing	___	___	___	___
9. Interpreting and drawing appropriate conclusions and implications from data analyses	___	___	___	___
10. Reporting research findings and implications, orally and in writing	___	___	___	___
11. Specifying desired performance outcomes (objectives) of instruction	___	___	___	___
12. Describing a product to be developed	___	___	___	___
13. Designing and managing field tryouts and tests	___	___	___	___
14. Specifying requirements for product revision based upon outcome evaluation	___	___	___	___
15. Selecting the most effective dissemination vehicles to convey information to target groups	___	___	___	___
16. Composing the information, within a chosen format, for accurate and pervasive dissemination	___	___	___	___

	Need for Training			Materials Desired
	Section A			Section B
Educational R-D-D-E Activities	Little or no need	Moderate need	Great need	Rank of activities for which training materials are desired
17. Implementing actual dissemination, including the direction of technical production personnel	___	___	___	___
18. Identifying goals of an educational system	___	___	___	___
19. Clarifying and explicating desired outcomes of an educational system	___	___	___	___
20. Comparing actual and intended educational system outcomes to identify discrepancies (needs) which exist in the system	___	___	___	___
21. Designing a monitoring system that will provide continual data on the status of an operating educational system	___	___	___	___
22. Helping educational system personnel to establish priorities for selected system objectives	___	___	___	___
23. Identifying and rating alternative strategies for attaining selected educational system objectives	___	___	___	___
24. Identifying and rating available educational program resources (human, material and financial) and/or potential sources of support	___	___	___	___
25. Writing proposals for research, development, dissemination and/or evaluation projects	___	___	___	___

	Need for Training			Materials Desired
	Section A			Section B
Educational R-D-D-E Activities	Little or no need	Moderate need	Great need	Rank of activities for which training materials are desired
26. Monitoring educational programs to detect deviations from design or specifiied procedures through techniques such as unobtrusive measures, systems analysis, and observational techniques	___	___	___	___
27. Developing general criteria and designing data collection procedures for application in measuring the effectiveness and efficiency of existing innovative practices and products, i.e., minimum standards and outcomes which indicate successful utilization of practices and products	___	___	___	___
28. If necessary, translating program objectives into behavioral terms	___	___	___	___
29. Establishing standards or norms for judging whether objectives have been attained	___	___	___	___
30. Selecting (or developing) and using techniques of measurement to yield information relevant to standards to be used	___	___	___	___

10. How much value do you place on the following training approaches for current employees? Place a check mark in the appropriate "value" column

	Value of Approach		
Training Approaches	Little or no value	Moderate Value	Great Value
A. Three to five day institutes or seminars	____	____	____
B. Longer institutes	____	____	____
C. One to two week short courses	____	____	____
D. Longer courses	____	____	____
E. Internships in other agencies	____	____	____
F. Correspondence courses	____	____	____
G. Extension or other course arrangements with colleges or universities on a released time basis	____	____	____
H. Extension or other course arrangements with colleges or universities on an employee's own time	____	____	____
I. Other (specify)________________________	____	____	____

11. Indicate for each personnel category the number of currently unfilled positions, the number of losses in the last year and the number of personnel added in the last year. (If none, write "none" opposite the appropriate category.)

Personnel Categories	Number current unfilled positions	Number losses in last year	Number additions in last year
Director and Principal Investigator	____	____	____
R&D Associate	____	____	____
R&D Assistant	____	____	____
R&D Intern	____	____	____
R&D Technician	____	____	____
R&D Paraprofessional	____	____	____
Clerical	____	____	____

Indicate major reasons for current vacancies, if any. ____________________

____

Indicate major reasons for losses, if any. ____________________

____

Indicate major reasons for additions, if any. ____________________

____

12. How many employees do you anticipate hiring in the next two years for each of the following levels? (If none, write "none" opposite the appropriate category).

Personnel Categories	Number to be Hired
Director and principal investigator	____
R&D Associate	____
R&D Assistant	____
R&D Intern	____
R&D Technician	____
R&D Paraprofessional	____
Clerical	____

13. If your funding were to be increased by half (50% more than current funding) in the next year:

A. How many people would you need in addition to present staff and at what levels? (e.g., "3 R&D associates") ____________________

____

B. What kinds of skills would they represent? (e.g., proposal writing, statistical analysis) ____________________

____

14. Please list alphabetically all the personnel except clerical who work in the unit or on the project. Then follow the steps discussed on the following page for selecting personnel who will complete Questionnaire B.

____

____

____

____

____

____

____

____

____

____

____

PLEASE USE THE LAST PAGE TO COMMENT ON THE QUESTIONNAIRE

PROCEDURE FOR SELECTING QUESTIONNAIRE B RESPONDENTS

After you have listed all personnel with the exception of those in clerical positions, four individuals should be chosen who will complete the Form B (Employee) Questionnaires. In order that a random group will be chosen, we ask that you follow the procedure shown below.

Step #1 Starting with Number 1 for the first name on the list, number all remaining names consecutively.

Step #2 Divide your total number of employees by four. This will give you a quotient, and a remainder in some instances.

Step #3 Use the remainder as a means of locating the first individual to be selected, i.e., if the remainder is 3, count down to the third individual from the top of the list.

Step #4 Use the quotient to select the remaining three people, i.e., if the quotient is two, take every second person after the initial person has been selected according to Step #3. In this case you would continue selecting every second person until three have been identified.

If you have four, or a lesser number on your staff, then all of them would be requested to complete the questionnaire.

For Example:

Example #1

Staff size of 13 divided by four equals a quotient of 3, remainder of 1.

With a remainder of 1, the first name on the list is chosen initially. With a quotient of 3, count down to the third name below the one already chosen, or name #4 on the list. Continue taking every third name until a total of four have been selected.

Example #2

Staff size of 6 divided by 4 equals a quotient of 1, remainder of 2.

As the first step, select the second name on the list. Thereafter, take the next three consecutive names, since the quotient equals 1.

Comments on the Questionnaire

Since this questionnaire is being tested before preparation in its final form for use throughout the country with educational R-D-D-E personnel, your comments on its content and format are as valuable as the responses you have made. Please comment as frankly as you desire.

For each comment, please reference the page and item number so that we can make the appropriate changes (e.g., page____, item____, "could not understand the meaning of activity #____________"; or, page____, item____, "could not understand what I was supposed to do", and so on.

SURVEY OF EDUCATION PERSONNEL IN RESEARCH, DEVELOPMENT, DIFFUSION AND EVALUATION ACTIVITIES

To the Respondent:

The attached Questionnaire B is under development in connection with a survey of the demand for Research Development, Diffusion and Evaluation personnel in Education. You have been identified by your supervisor as one who engages in one or more of these activities. We are asking for your cooperation in filling out the questionnaire and in giving us any comments you may want to make concerning its format and wording and the general answerability of the questions with reference to your work activities and your education and experience.

When you have completed the questionnaire and your comments, please return them to us in the attached stamped, self-addressed envelope.

Your cooperation is greatly appreciated.

Sincerely,

Carl H. Rittenhouse

Carl H. Rittenhouse
Senior Research Psychologist

enclosures
  questionnaire
  return envelope

PLEASE FILL OUT THIS QUESTIONNAIRE AS SOON AS YOU RECEIVE IT AND RETURN IT TO US IMMEDIATELY UPON COMPLETION.

Questionnaire B

Project Code No.

Name(optional)________________________________

Please indicate the complete title of the project or activity on which you are currently working.____

____

____

Write your job title or position____

How long have you worked in present job?

Number of years_____Number of months if less than one year_____

How many people do you supervise in this capacity?______________________

Briefly describe what you do on this job._____________________________

____

____

____

____

____

____

Sex	Check the appropriate		Actual Annual Salary	
___Male	age category		___Under $3,000	___$18,000 - $20,999
___Female	___Under 25	___45 - 49	___$ 3,000 - $ 5,999	___$21,000 - $23,999
	___25 - 29	___50 - 54	___$ 6,000 - $ 8,999	___$24,000 - $26,999
	___30 - 34	___55 - 59	___$ 9,000 - $11,999	___$27,000 - $29.999
	___35 - 39	___60 - 64	___$12,000 - $14,999	___$30,000 or more
	___40 - 44	___Over 64	___$15,000 - $17,999	

If less than full time, indicate approximate fraction of full time that you work, e.g., 1/4, 1/2, etc._______.

Check the highest level of formal education you have obtained.

___ High school with no college level course work

___ High school and some college courses, but do not have a degree or certificate yet. Number of years completed___

___ Two years of college completed with a degree or certificate

___ Bachelors degree

___ Masters degree

___ Doctorate or Post-doctoral degree

___ Other professional degree, specify type______________________________

1. On the following pages is a list of activities that may be performed by those working in educational research, development, diffusion and/or evaluation. We understand that your current project work falls appropriately under one or more of those general descriptive headings. The more detailed list of activities or skills given below includes some items that fall under each of the general headings, but for the purposes of this question, it is only important that you respond to each individual item in terms of your present activity without regard to its possible placement under one of the more general area descriptions. Some of the activities in which you engage on your present job may not be included in the list. In order to avoid putting an excessive burden of time and effort on any respondent in completing the questionnaire, a longer, comprehensive list was divided into several parts. You need concern yourself only with the items on this list. Other respondents will respond to other items so as to obtain complete coverage.

   Please respond to the activities in the following way:

   First, read the activity description, then in Section A, indicate the degree to which you are now involved in it by placing a check mark in the appropriate column.

   In Section B, indicate how you acquired the skills involved in the activity i.e., through formal training, or experience on the job, or through a combination of both. However, if you have not acquired the skills for the activity place a check mark in the first column of Section B and leave the remaining columns of Section B blank.

   In Section C, show the extent to which you feel a need for further training in skills associated with the activity, regardless of how you answered it in the preceding Section B.

   At the top of the table is an example of how a person might respond to the example item of "Developing measuring instruments." This individual indicated "moderate involvement" in the activity, felt that he had acquired the necessary skills mainly through "job experience" and finally, saw a "great need" for additional training in the associated skills.

	Section A			
	Involvement in Activities			
R-D-D-E ACTIVITIES	Little or No Involvement	Moderate Involvement	Heavy Involvement	Have Not Acquired Skills
Example: Developing measuring instruments		X		
1. Drawing research implications from results of prior research studies	______	______	______	______
2. Identifying and delineating significant researchable problems	______	______	______	______
3. Specifying data or evidence necessary for a rigorous test of an hypothesis	______	______	______	______
4. Understanding experimental, quasi-experimental, and other systematic approaches to inquiry, and drawing on such knowledge in designing a research study appropriate to the problem under consideration	______	______	______	______
5. Selecting appropriate techniques of measurement	______	______	______	______
6. Organizing data for analysis	______	______	______	______
7. Interpreting and drawing appropriate conclusions and implications from data analyses	______	______	______	______
8. Reporting research findings and implications, orally and in writing	______	______	______	______
9. Specifying desired performance outcomes (objectives) of instruction	______	______	______	______
10. Devising techniques to identify entry capabilities of learners	______	______	______	______
11. Describing a product to be developed	______	______	______	______
12. Directing the work of materials production personnel	______	______	______	______
13. Reporting evaluation of outcomes	______	______	______	______
14. Selecting from all available information about developed product packages that which can be most effectively disseminated	______	______	______	______
15. Selecting the most effective dissemination vehicles to convey information to target groups	______	______	______	______

Section B				Section C		
How Skills Were Acquired				Need for Additional Training in Associated Skills		
Have Not Acquired Skills	Mostly Through Formal Education and Training	Mostly Through Experience on the Job	About Equally Through a Combination of both	Little or No Additional Need	Moderate Need	Great Need for Additional Training
		X				X
____	____	____	____	____	____	____
____	____	____	____	____	____	____
____	____	____	____	____	____	____
____	____	____	____	____	____	____
____	____	____	____	____	____	____
____	____	____	____	____	____	____
____	____	____	____	____	____	____
____	____	____	____	____	____	____
____	____	____	____	____	____	____
____	____	____	____	____	____	____
____	____	____	____	____	____	____
____	____	____	____	____	____	____
____	____	____	____	____	____	____
____	____	____	____	____	____	____
____	____	____	____	____	____	____

	Section A				H
	Involvement in Activities				
R-D-D-E ACTIVITIES	Little or No Involvement	Moderate Involvement	Heavy Involvement	Have Not Acquired Skills	M T F Ed Tr
16. Implementing actual dissemination, including the direction of technical production personnel	____	____	____	____	____
17. Selecting appropriate setting and personnel for a product demonstration	____	____	____	____	____
18. Designing modifications of a product to fit the adopting organization or system, when necessary	____	____	____	____	____
19. Identifying goals of an educational system	____	____	____	____	____
20. Clarifying and explicating desired outcomes of an educational system	____	____	____	____	____
21. Helping educational system personnel to develop objectives which, if attained, will solve the problems resulting from discrepancies between actual and intended system outcomes	____	____	____	____	____
22. Identifying and rating alternative strategies for attaining the selected educational system objectives	____	____	____	____	____
23. Identifying and rating available educational program resources (human, material, and financial) and/or potential sources of support	____	____	____	____	____
24. Selecting a strategy for educational program implementation					
25. Writing proposals for research, development, dissemination and/or evaluation projects	____	____	____	____	____
26. Providing immediate feedback to educational program operators for their possible use in making decisions about modifications of plans, procedures, or resource allocations	____	____	____	____	____
27. Developing general criteria and designing data collection procedures for application in measuring the effectiveness and efficiency of existing innovative practices and products, i.e., minimum standards and outcomes which indicate successful utilization of practices and products	____	____	____	____	____

Section B				Section C		
How Skills Were Acquired				Need for Additional Training in Associated Skills		
Have Not Acquired Skills	Mostly Through Formal Education and Training	Mostly Through Experience on the Job	About Equally Through a Combination of Both	Little or No Additional Need	Moderate Need	Great Need fo Additional Training
____	____	____	____	____	____	____
____	____	____	____	____	____	____
____	____	____	____	____	____	____
____	____	____	____	____	____	____
____	____	____	____	____	____	____
____	____	____	____	____	____	____
____	____	____	____	____	____	____
____	____	____	____	____	____	____
____	____	____	____	____	____	____
____	____	____	____	____	____	____
____	____	____	____	____	____	____

	Section A Involvement in Activities			How	
R-D-D-E ACTIVITIES	Little or No Involvement	Moderate Involvement	Heavy Involvement	Have Not Acquired Skills	Mos Thr For Educ a Trai
28. Identifying situations in which designated behavior can be observed and recorded	____	____	____	____	____
29. Selecting (or developing) and using techniques of measurement to yield information relevant to standards to be used	____	____	____	____	____
30. Selecting an appropriate technique to analyze data	____	____	____	____	____
31. Deciding what recommendations to make as a result of outcomes	____	____	____	____	____

Section B				Section C		
How Skills Were Acquired				Need for Additional Training in Associated Skills		
Have Not Acquired Skills	Mostly Through Formal Education and Training	Mostly Through Experience on the Job	About Equally Through a Combination of Both	Little or No Additional Need	Moderate Need	Great Need for Additional Training
______	______	______	______	______	______	______
______	______	______	______	______	______	______
______	______	______	______	______	______	______
______	______	______	______	______	______	______

2. A number of educational areas are listed below. For each of the areas, please indicate the approximate amount of formal course work, graduate or undergraduate, you have completed by placing a checkmark in the appropriate column. If you have had no course work in the area, place the checkmark in the "none" column.

Educational Areas	Number of Courses			
	None (0)	Few (1 or 2)	Several (3 to 5)	Many (6 or more)
1. Statistics	___	___	___	___
2. Learning theory	___	___	___	___
3. Social Psychology	___	___	___	___
4. Audio-Visual Education	___	___	___	___
5. Marketing	___	___	___	___
6. Sociology	___	___	___	___
7. Research design	___	___	___	___
8. Testing and measurement	___	___	___	___
9. Systems theory	___	___	___	___
10. Advertising	___	___	___	___
11. Educational administration	___	___	___	___
12. Political science	___	___	___	___
13. Philosophy of science	___	___	___	___
14. Data processing	___	___	___	___
15. Theories of teaching	___	___	___	___
16. Curriculum development	___	___	___	___
17. Communication theory	___	___	___	___
18. Decision theory	___	___	___	___
19. Information theory	___	___	___	___
20. Journalism	___	___	___	___
21. Anthropology	___	___	___	___
22. Other (specify) ________	___	___	___	___

Circle the three areas from those listed that are most important for your current work, whether or not you have had course work in those areas

3. Since you have been employed in this field how much of the following kinds of training relevant to educational research, development, diffusion, or evaluation have you had? Indicate by placing a check mark in the appropriate column after each kind of training

Type of Training	Amount of Training			
	None	Very little	Moderate	Extensive
Special supervised on the job training or internship				
In-service courses				
Other(specify)				

4. Below is a list of types of employers.

In Section A, indicate the number of years you have been employed by each of the types of employers. If none, write "none" in the space.

In Section B, indicate the relevance of each type of previous employment to your present job by placing a checkmark in the appropriate column. If you have no previous experience put a check mark here _____, and go to the next item.

Previous Employers	Section A	Section B Relevance to present job		
	Number of years	Low	Moderate	High
College or university				
Educational R-D-D-E organizations				
Government				
Business and/or industry				
Other (specify ________________				

5. Indicate any skills you have in educational or R-D-D-E areas that you do not use in your present job. ____

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____

____

6. To what extent are you satisfied with your present job? Place a checkmark below in the appropriate category.

Completely Satisfied	Satisfied	Undecided	Dissatisfied	Completely Dissatisfied
_____	_____	_____	_____	_____

7. To what extent are there advancement possibilities in your present job? Place a checkmark below the appropriate category.

Highly Probable	Probable	Unknown	Improbable	Highly Improbable
____	____	____	____	____

8. Below is a list of types of training or training materials. Indicate the value you place upon each type either to meet current job requirements or advancement plans by placing a checkmark in the appropriate column after each type.

Types of additional training	Little or no value	Some value	Great value
A. Programmed instruction materials for your own use	____	____	____
B. Three to five day institutes	____	____	____
C. Longer institutes	____	____	____
D. One or two week university short courses	____	____	____
E. Correspondence courses	____	____	____
F. Extension courses	____	____	____
G. Other (specify)	____	____	____

9. How important do you feel it is to receive college credit for any additional training you might obtain? Indicate by placing a checkmark below the appropriate category.

Extremely Important	Important	Undecided	Unimportant	Completely Unimportant
____	____	____	____	____

If you checked "important" or "extremely important", please give your reasons

____

____

____

PLEASE USE THE NEXT PAGE TO COMMENT ON THE QUESTIONNAIRE.

Comments on the Questionnaire

Since this questionnaire is being tested before preparation in its final form for use throughout the country with educational R-D-D-E personnel, your comments on its content and format are as valuable as the responses you have made. Please comment as frankly as you desire.

For each comment, please reference the page and item number so that we can make the appropriate changes (e.g., page____, item____, "could not understand the meaning of activity #___________"; or, page____, item____, "could not understand what I was supposed to do", and so on.

SURVEY OF EDUCATION PERSONNEL IN RESEARCH, DEVELOPMENT, DIFFUSION AND EVALUATION ACTIVITIES

To the Respondent:

The attached Questionnaire B is under development in connection with a survey of the demand for Research Development, Diffusion and Evaluation personnel in Education. You have been identified by your supervisor as one who engages in one or more of these activities. We are asking for your cooperation in filling out the questionnaire and in giving us any comments you may want to make concerning its format and wording and the general answerability of the questions with reference to your work activities and your education and experience.

When you have completed the questionnaire and your comments, please return them to us in the attached stamped, self-addressed envelope.

Your cooperation is greatly appreciated.

Sincerely,

Carl H. Rittenhouse

Carl H. Rittenhouse
Senior Research Psychologist

enclosures
  questionnaire
  return envelope

PLEASE FILL OUT THIS QUESTIONNAIRE AS SOON AS YOU RECEIVE IT AND RETURN IT TO US IMMEDIATELY UPON COMPLETION

Questionnaire B

Project Code No.

Name(optional)________________________________

Please indicate the complete title of the project or activity on which you are currently working.____

____

____

Write your job title or position____

How long have you worked in present job?

Number of years______Number of months if less than one year________

How many people do you supervise in this capacity?__________________

Briefly describe what you do on this job.__________________________

____

____

____

____

____

____

Sex

___Male

___Female

Check the appropriate age category

__ Under 20

__ 25 - 29

__ 30 - 34

__ 35 - 39

__ 40 - 44

__ 45 - 49

__ 50 - 54

__ 55 - 59

__ 60 - 64

__ Over 64

Actual Annual Salary

__ Under $3,000

__ $ 3,000 - $ 5,999

__ $ 6,000 - $ 8,999

__ $ 9,000 - $ 11,999

__ $ 12,000 - $ 14,999

__ $ 15,000 - $ 17,999

__ $18,000 - $20,999

__ $21,000 - $23,999

__ $24,000 - $26,999

__ $27,000 - $29,999

__ $30,000 or more

If less than full time, indicate approximate fraction of full time that you work, e.g., 1/4, 1/2,______________

Check the highest level of formal education you have obtained.

__ High school with no college level course work

__ High school and some college courses, but do not have a degree or certificate yet. Number of years completed______

__ Two years of college completed with a degree or certificate

__ Bachelors degree

__ Masters degree

__ Doctorate or Post-doctoral degree

__ Other professional degree, specify type____________________________

1. On the following pages is a list of activities that may be performed by those working in educational research, development, diffusion and/or evaluation. We understand that your current project work falls appropriately under one or more of those general descriptive headings. The more detailed list of activities or skills given below includes some items that fall under each of the general headings, but for the purposes of this question, it is only important that you respond to each individual item in terms of your present activity without regard to its possible placement under one of the more general area descriptions. Some of the activities in which you engage on your present job may not be included in the list. In order to avoid putting an excessive burden of time and effort on any respondent in completing the questionnaire, a longer, comprehensive list was divided into several parts. You need concern yourself only with the items on this list. Other respondents will respond to other items so as to obtain complete coverage.

   Please respond to the activities in the following way:

   First, read the activity description, then in Section A, indicate the degree to which you are now involved in it by placing a check mark in the appropriate column.

   In Section B, indicate how you acquired the skills involved in the activity i.e., through formal training, or experience on the job, or through a combination of both. However, if you have not acquired the skills for the activity place a check mark in the first column of Section B and leave the remaining columns of Section B blank.

   In Section C, show the extent to which you feel a need for further training in skills associated with the activity, regardless of how you answered it in the preceding Section B.

   At the top of the table is an example of how a person might respond to the example item of "Developing measuring instruments." This individual indicated "moderate involvement" in the activity, felt that he had acquired the necessary skills mainly through "job experience" and finally, saw a "great need" for additional training in the associated skills.

	Section A				
	Involvement in Activities				Ho
R-D-D-E ACTIVITIES	Little or No Involvement	Moderate Involvement	Heavy Involvement	Have Not Acquired Skills	Mo Th Fo Edu Tra
Example: Developing measuring instruments		X			
1. Identifying and delineating significant researchable problems	___	___	___	___	___
2. Procuring and/or managing resources (material and human) necessary to reach research objectives	___	___	___	___	___
3. Identifying a population to which results should be generalized and a sample representative of that population, using appropriate sampling techniques to draw the sample	___	___	___	___	___
4. Applying a research design, recognizing, explicating and controlling threats to validity	___	___	___	___	___
5. Developing measuring instruments	___	___	___	___	___
6. Understanding the general role, types, and assumptions underlying various statistical techniques, and drawing on such knowledge in selecting and using appropriate techniques of data analysis	___	___	___	___	___
7. Interpreting and drawing appropriate conclusions and implications from data analyses	___	___	___	___	___
8. Interpreting information concerning education goals	___	___	___	___	___
9. Specifying desired performance outcomes (objectives) of instruction	___	___	___	___	___
10. Identifying alternative instructional and media techniques	___	___	___	___	___
11. Describing a product to be developed	___	___	___	___	___
12. Selecting or devising appropriate techniques for measuring outcomes	___	___	___	___	___
13. Interpreting evaluation findings	___	___	___	___	___
14. Selecting the most effective dissemination vehicles, to convey information to target groups	___	___	___	___	___

	Section B				Section C		
	How Skills Were Acquired				Need for Additional Training in Associated Skills		
y ve- t	Have Not Acquired Skills	Mostly Through Formal Education and Training	Mostly Through Experience on the Job	About Equally Through a Combination of both	Little or No Additional Need	Moderate Need	Great Need for Additional Training
			X				X
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___

	Section A			
	Involvement in Activities			
R-D-D-E ACTIVITIES	Little or No Involvement	Moderate Involvement	Heavy Involvement	Have Not Acquired Skills
15. Composing the information, within a chosen format, for accurate and pervasive dissemination	___	___	___	___
16. Implementing actual dissemination, including the direction of technical production personnel	___	___	___	___
17. Managing and coordinating a product demonstration effort	___	___	___	___
18. Designing procedures for modifying the adopting system or organization to fit a product, when necessary, including the design of needed training programs	___	___	___	___
19. Assessing the social relevance of the goals of an educational system	___	___	___	___
20. Measuring current actual outcomes of an educational system through techniques such as:				
a. demographic analysis	___	___	___	___
b. economic analysis	___	___	___	___
c. psychometric analysis	___	___	___	___
d. systems analysis	___	___	___	___
e. observational techniques	___	___	___	___
21. Designing a monitoring system that will provide continual data on the status of an operating educational system	___	___	___	___
22. Identifying and rating alternative strategies for attaining the selected educational system objectives	___	___	___	___
23. Identifying and rating available educational program resources (human, material, and financial) and/or potential sources of support	___	___	___	___
24. Selecting a source of support or the available resources which will be used to implement an educational program	___	___	___	___

	Section B				Section C		
	How Skills Were Acquired				Need for Additional Training in Associated Skills		
e-	Have Not Acquired Skills	Mostly Through Formal Education and Training	Mostly Through Experience on the Job	About Equally Through a Combination of Both	Little or No Additional Need	Moderate Need	Great Need for Additional Training
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
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	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___

Section A

	Involvement in Activities			How Sk	
R-D-D-E ACTIVITIES	Little or No Involvement	Moderate Involvement	Heavy Involvement	Have Not Acquired Skills	Mostly Throug Formal Educati and Trainin
25. Designing and selecting indicators of progress in educational programs	___	___	___	___	___
26. Perceiving human relation problems that threaten the success of educational programs	___	___	___	___	___
27. Developing general criteria and designing data collection procedures for application in measuring the effectiveness and efficiency of existing innovative practices and products, i.e., minimum standards and outcomes which indicate successful utilization of practices and products	___	___	___	___	___
28. Establishing standards or norms for judging whether objectives have been attained	___	___	___	___	___
29. Selecting (or developing) and using techniques of measurement to yield information relevant to standards to be used	___	___	___	___	___
30. Analyzing the evidence yielded by an evaluation	___	___	___	___	___
31. Estimating the potential impact of outcomes on the problem area being served	___	___	___	___	___

Section B				Section C		
How Skills Were Acquired				Need for Additional Training in Associated Skills		
Have Not Acquired Skills	Mostly Through Formal Education and Training	Mostly Through Experience on the Job	About Equally Through a Combination of both	Little or No Additional Need	Moderate Need	Great Need for Additional Training
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___

2. A number of educational areas are listed below. For each of the areas, please indicate the approximate amount of formal course work, graduate or undergraduate, you have completed by placing a checkmark in the appropriate column. If you have had no course work in the area, place the checkmark in the "none" column.

Educational Areas	Number of Courses			
	None (0)	Few (1 or 2)	Several (3 to 5)	Many (6 or more)
1. Statistics	___	___	___	___
2. Learning theory	___	___	___	___
3. Social Psychology	___	___	___	___
4. Audio-Visual Education	___	___	___	___
5. Marketing	___	___	___	___
6. Sociology	___	___	___	___
7. Research design	___	___	___	___
8. Testing and measurement	___	___	___	___
9. Systems theory	___	___	___	___
10. Advertising	___	___	___	___
11. Educational administration	___	___	___	___
12. Political science	___	___	___	___
13. Philosophy of science	___	___	___	___
14. Data processing	___	___	___	___
15. Theories of teaching	___	___	___	___
16. Curriculum development	___	___	___	___
17. Communication theory	___	___	___	___
18. Decision theory	___	___	___	___
19. Information theory	___	___	___	___
20. Journalism	___	___	___	___
21. Anthropology	___	___	___	___
22. Other (specify) ________	___	___	___	___

Circle the three areas from those listed that are most important for your current work, whether or not you have had course work in those areas

3. Since you have been employed in this field how much of the following kinds of training relevant to educational research, development, diffusion, or evaluation have you had? Indicate by placing a check mark in the appropriate column after each kind of training

Type of Training	Amount of Training			
	None	Very little	Moderate	Extensive
Special supervised on the job training or internship				
In-service courses				
Other(specify)				

4. Below is a list of types of employers.

In Section A, indicate the number of years you have been employed by each of the types of employers. If none, write "none" in the space.

In Section B, indicate the relevance of each type of previous employment to your present job by placing a checkmark in the appropriate column. If you have no previous experience put a check mark here _____, and go to the next item.

Previous Employers	Section A	Section B Relevance to present job		
	Number of years	Low	Moderate	High
College or university				
Educational R-D-D-E organizations				
Government				
Business and/or industry				
Other (specify ____________				

5. Indicate any skills you have in educational or R-D-D-E areas that you do not use in your present job. ______________________________

____

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____

6. To what extent are you satisfied with your present job? Place a checkmark below in the appropriate category.

Completely Satisfied	Satisfied	Undecided	Dissatisfied	Completely Dissatisfied
_____	_____	_____	_____	_____

7. To what extent are there advancement possibilities in your present job? Place a checkmark below the appropriate category.

Highly Probable	Probable	Unknown	Improbable	Highly Improbable
____	____	____	____	____

8. Below is a list of types of training or training materials. Indicate the value you place upon each type either to meet current job requirements or advancement plans by placing a checkmark in the appropriate column after each type.

Types of additional training	Little or no value	Some value	Great value
A. Programmed instruction materials for your own use	____	____	____
B. Three to five day institutes	____	____	____
C. Longer institutes	____	____	____
D. One or two week university short courses	____	____	____
E. Correspondence courses	____	____	____
F. Extension courses	____	____	____
G. Other (specify)	____	____	____

9. How important do you feel it is to receive college credit for any additional training you might obtain? Indicate by placing a checkmark below the appropriate category.

Extremely Important	Important	Undecided	Unimportant	Completely Unimportant
____	____	____	____	____

If you checked "important" or "extremely important", please give your reasons

____

____

____

PLEASE USE THE NEXT PAGE TO COMMENT ON THE QUESTIONNAIRE.

Comments on the Questionnaire

Since this questionnaire is being tested before preparation in its final form for use throughout the country with educational R-D-D-E personnel, your comments on its content and format are as valuable as the responses you have made. Please comment as frankly as you desire.

For each comment, please reference the page and item number so that we can make the appropriate changes (e.g., page____, item____, "could not understand the meaning of activity #___________"; or, page____, item____, "could not understand what I was supposed to do", and so on.

SURVEY OF EDUCATION PERSONNEL IN RESEARCH, DEVELOPMENT, DIFFUSION AND EVALUATION ACTIVITIES

To the Respondent:

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When you have completed the questionnaire and your comments, please return them to us in the attached stamped, self-addressed envelope.

Your cooperation is greatly appreciated.

Sincerely,

Carl H. Rittenhouse

Carl H. Rittenhouse
Senior Research Psychologist

enclosures
  questionnaire
  return envelope

PLEASE FILL OUT THIS QUESTIONNAIRE AS SOON AS YOU RECEIVE IT AND RETURN IT TO US IMMEDIATELY UPON COMPLETION.

Questionnaire B

Project Code No.

Name(optional) ______________________________

Please indicate the complete title of the project or activity on which you are currently working. ______________________________

____

____

Write your job title or position ______________________________

How long have you worked in present job?

Number of years ______ Number of months if less than one year ________

How many people do you supervise in this capacity? ______________________

Briefly describe what you do on this job. ______________________

____

____

____

____

____

____

Sex

___ Male

___ Female

Check the appropriate age category

__ Under 20

__ 25 - 29

__ 30 - 34

__ 35 - 39

__ 40 - 44

__ 45 - 49

__ 50 - 54

__ 55 - 59

__ 60 - 64

__ Over 64

Actual Annual Salary

__ Under $3,000

__ $ 3,000 - $ 5,999

__ $ 6,000 - $ 8,999

__ $ 9,000 - $ 11,999

__ $ 12,000 - $ 14,999

__ $ 15,000 - $ 17,999

__ $18,000 - $20,999

__ $21,000 - $23,999

__ $24,000 - $26,999

__ $27,000 - $29,999

__ $30,000 or more

If less than full time, indicate approximate fraction of full time that you work, e.g., 1/4, 1/2, ______________

Check the highest level of formal education you have obtained.

__ High school with no college level course work

__ High school and some college courses, but do not have a degree or certificate yet. Number of years completed ______

__ Two years of college completed with a degree or certificate

__ Bachelors degree

__ Masters degree

__ Doctorate or Post-doctoral degree

__ Other professional degree, specify type ______________________________

1. On the following pages is a list of activities that may be performed by those working in educational research, development, diffusion and/or evaluation. We understand that your current project work falls appropriately under one or more of those general descriptive headings. The more detailed list of activities or skills given below includes some items that fall under each of the general headings, but for the purposes of this question, it is only important that you respond to each individual item in terms of your present activity without regard to its possible placement under one of the more general area descriptions. Some of the activities in which you engage on your present job may not be included in the list. In order to avoid putting an excessive burden of time and effort on any respondent in completing the questionnaire, a longer, comprehensive list was divided into several parts. You need concern yourself only with the items on this list. Other respondents will respond to other items so as to obtain complete coverage.

Please respond to the activities in the following way:

First, read the activity description, then in Section A, indicate the degree to which you are now involved in it by placing a check mark in the appropriate column.

In Section B, indicate how you acquired the skills involved in the activity i.e., through formal training, or experience on the job, or through a combination of both. However, if you have not acquired the skills for the activity place a check mark in the first column of Section B and leave the remaining columns of Section B blank.

In Section C, show the extent to which you feel a need for further training in skills associated with the activity, regardless of how you answered it in the preceding Section B.

At the top of the table is an example of how a person might respond to the example item of "Developing measuring instruments." This individual indicated "moderate involvement" in the activity, felt that he had acquired the necessary skills mainly through "job experience" and finally, saw a "great need" for additional training in the associated skills.

Section A

	Involvement in Activities			
R-D-D-E ACTIVITIES	Little or No Involvement	Moderate Involvement	Heavy Involvement	Have Not Acquired Skills
Example: Developing measuring instruments	X			
1. Identifying and delineating significant researchable problems	____	____	____	____
2. Interpreting, evaluating, and synthesizing relevant literature	____	____	____	____
3. Formulating alternative generalizations from predicted research outcomes	____	____	____	____
4. Identifying classes of behavioral outcomes for measurement	____	____	____	____
5. Assessing the validity of outcome measures	____	____	____	____
6. Using aids in data analyses, such as computer processing	____	____	____	____
7. Interpreting and drawing appropriate conclusions and implications from data analyses	____	____	____	____
8. Drawing on research results in planning developmental activities	____	____	____	____
9. Specifying desired performance outcomes (objectives) of instruction	____	____	____	____
10. Determining appropriate sequences of topics in instruction	____	____	____	____
11. Describing a product to be developed	____	____	____	____
12. Designing and managing initial laboratory tests of developed techniques and materials	____	____	____	____
13. Specifying requirements for product dissemination vehicles to convey information to target groups	____	____	____	____

	Section B				Section C		
	How Skills Were Acquired				Need for Additional Training in Associated Skills		
-	Have Not Acquired Skills	Mostly Through Formal Education and Training	Mostly Through Experience on the Job	About Equally Through a Combination of Both	Little or No Additional Need	Moderate Need	Great Need for Additional Training
			X				X
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___
	___	___	___	___	___	___	___

Section A

R-D-D-E ACTIVITIES	Involvement in Activities			How	
	Little or No Involvement	Moderate Involvement	Heavy Involvement	Have Not Acquired Skills	Most Thro Form Educa an Train
14. Selecting the most effective dissemination vehicles to convey information to target groups	___	___	___	___	___
15. Implementing actual dissemination, including the direction of technical production personnel	___	___	___	___	___
16. Designing and implementing techniques for evaluating the effectiveness of a dissemination effort	___	___	___	___	___
17. Evaluating the effectiveness of a product demonstration	___	___	___	___	___
18. Identifying potential barriers to implementation after product adoption	___	___	___	___	___
19. Identifying values that are implicit in educational system goals	___	___	___	___	___
20. Comparing actual and intended educational system outcomes to identify discrepancies (needs) which exist in the system	___	___	___	___	___
21. Helping educational system personnel to apply criteria to lists of possible objectives in order to select those which are feasible within constraints of an operating context	___	___	___	___	___
22. Identifying and rating alternative strategies for attaining the selected educational system objectives	___	___	___	___	___
23. Identifying and rating available educational program resources (human, material, and financial) and/or potential sources of support	___	___	___	___	___
24. Predicting the potential barriers to success in a proposed course of educational program implementation action and judging the potential of the strategy for overcoming the estimated procedural barriers	___	___	___	___	___

Section B				Section C		
How Skills Were Acquired				Need for Additional Training in Associated Skills		
ave Not cquired Skills	Mostly Through Formal Education and Training	Mostly Through Experience on the Job	About Equally Through a Combination of Both	Little or No Additional Need	Moderate Need	Great Need for Additional Training
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___

	Section A				
	Involvement in Activities				
R-D-D-E ACTIVITIES	Little or No Involvement	Moderate Involvement	Heavy Involvement	Have Not Acquired Skills	E T
25. Monitoring educational programs to detect deviations from design or specified procedures through techniques such as unobtrusive measures, systems analysis, and observational techniques	___	___	___	___	
26. Applying appropriate designs to educational evaluation studies	___	___	___	___	
27. Developing general criteria and designing data collection procedures for application in measuring the effectiveness and efficiency of existing innovative practices and products, i.e., minimum standards and outcomes which indicate successful utilization of practices and produces	___	___	___	___	
28. Selecting (or developing) and using techniques of measurement to yield information relevant to standards to be used	___	___	___	___	
29. Assessing the validity of outcome measures	___	___	___	___	
30. Judging the strengths and weaknesses of the plans and procedures employed for meeting project objectives	___	___	___	___	
31. Providing sufficient information to the decision-maker to enable him to decide whether to continue, modify, or terminate an activity or process evaluated	___	___	___	___	

Section B				Section C		
How Skills Were Acquired				Need for Additional Training in Associated Skills		
Have Not Acquired Skills	Mostly Through Formal Education and Training	Mostly Through Experience on the Job	About Equally Through a Combination of Both	Little or No Additional Need	Moderate Need	Great Need for Additional Training
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___

2. A number of educational areas are listed below. For each of the areas, please indicate the approximate amount of formal course work, graduate or undergraduate, you have completed by placing a checkmark in the appropriate column. If you have had no course work in the area, place the checkmark in the "none" column.

Educational Areas	Number of Courses			
	None (0)	Few (1 or 2)	Several (3 to 5)	Many (6 or more)
1. Statistics				
2. Learning theory				
3. Social Psychology				
4. Audio-Visual Education				
5. Marketing				
6. Sociology				
7. Research design				
8. Testing and measurement				
9. Systems theory				
10. Advertising				
11. Educational administration				
12. Political science				
13. Philosophy of science				
14. Data processing				
15. Theories of teaching				
16. Curriculum development				
17. Communication theory				
18. Decision theory				
19. Information theory				
20. Journalism				
21. Anthropology				
22. Other(specify)				

Circle the three areas from those listed that are most important for your current work, whether or not you have had course work in those areas

3. Since you have been employed in this field how much of the following kinds of training relevant to educational research, development, diffusion, or evaluation have you had? Indicate by placing a check mark in the appropriate column after each kind of training

Type of Training	Amount of Training			
	None	Very little	Moderate	Extensive
Special supervised on the job training or internship				
In-service courses				
Other(specify)				

4. Below is a list of types of employers.

In Section A, indicate the number of years you have been employed by each of the types of employers. If none, write "none" in the space.

In Section B, indicate the relevance of each type of previous employment to your present job by placing a checkmark in the appropriate column. If you have no previous experience put a check mark here _____, and go to the next item.

Previous Employers	Section A Number of years	Section B Relevance to present job Low	 Moderate	 High
College or university				
Educational R-D-D-E organizations				
Government				
Business and/or industry				
Other (specify _______________				

5. Indicate any skills you have in educational or R-D-D-E areas that you do not use in your present job. ____________________

6. To what extent are you satisfied with your present job? Place a checkmark below in the appropriate category.

Completely Satisfied	Satisfied	Undecided	Dissatisfied	Completely Dissatisfied
____	____	____	____	____

7. To what extent are there advancement possibilities in your present job? Place a checkmark below the appropriate category.

Highly Probable	Probable	Unknown	Improbable	Highly Improbable
____	____	____	____	____

8. Below is a list of types of training or training materials. Indicate the value you place upon each type either to meet current job requirements or advancement plans by placing a checkmark in the appropriate column after each type.

Types of additional training	Little or no value	Some value	Great value
A. Programmed instruction materials for your own use	____	____	____
B. Three to five day institutes	____	____	____
C. Longer institutes	____	____	____
D. One or two week university short courses	____	____	____
E. Correspondence courses	____	____	____
F. Extension courses	____	____	____
G. Other (specify)	____	____	____

9. How important do you feel it is to receive college credit for any additional training you might obtain? Indicate by placing a checkmark below the appropriate category.

Extremely Important	Important	Undecided	Unimportant	Completely Unimportant
____	____	____	____	____

If you checked "important" or "extremely important", please give your reasons

____

____

____

PLEASE USE THE NEXT PAGE TO COMMENT ON THE QUESTIONNAIRE.

Comments on the Questionnaire

Since this questionnaire is being tested before preparation in its final form for use throughout the country with educational R-D-D-E personnel, your comments on its content and format are as valuable as the responses you have made. Please comment as frankly as you desire.

For each comment, please reference the page and item number so that we can make the appropriate changes (e.g., page____, item____, "could not understand the meaning of activity #___________"; or, page____, item____, "could not understand what I was supposed to do", and so on.

SURVEY OF EDUCATION PERSONNEL IN RESEARCH, DEVELOPMENT, DIFFUSION AND EVALUATION ACTIVITIES

To the Respondent:

The attached Questionnaire B is under development in connection with a survey of the demand for Research Development, Diffusion and Evaluation personnel in Education. You have been identified by your supervisor as one who engages in one or more of these activities. We are asking for your cooperation in filling out the questionnaire and in giving us any comments you may want to make concerning its format and wording and the general answerability of the questions with reference to your work activities and your education and experience.

When you have completed the questionnaire and your comments, please return them to us in the attached stamped, self-addressed envelope.

Your cooperation is greatly appreciated.

Sincerely,

Carl H. Rittenhouse

Carl H. Rittenhouse
Senior Research Psychologist

enclosures
  questionnaire
  return envelope

PLEASE FILL OUT THIS QUESTIONNAIRE AS SOON AS YOU RECEIVE IT AND RETURN IT TO US IMMEDIATELY UPON COMPLETION.

FILMED FROM BEST AVAILABLE COPY

Questionnaire B

Project Code No.

Name(optional)____________________

Please indicate the complete title of the project or activity on which you are currently working.____________________

____

____

Write your job title or position____________________

How long have you worked in present job?

Number of years______Number of months if less than one year________

How many people do you supervise in this capacity?____________________

Briefly describe what you do on this job.____________________

____

____

____

____

____

____

Sex

___Male

___Female

Check the appropriate age category

__ Under 20

__ 25 - 29

__ 30 - 34

__ 35 - 39

__ 40 - 44

__ 45 - 49

__ 50 - 54

__ 55 - 59

__ 60 - 64

__ Over 64

Actual Annual Salary

__ Under $3,000

__ $ 3,000 - $ 5,999

__ $ 6,000 - $ 8,999

__ $ 9,000 - $ 11,999

__ $ 12,000 - $ 14,999

__ $ 15,000 - $ 17,999

__ $18,000 - $20,999

__ $21,000 - $23,999

__ $24,000 - $26,999

__ $27,000 - $29,999

__ $30,000 or more

If less than full time, indicate approximate fraction of full time that you work, e.g., 1/4, 1/2,______________

Check the highest level of formal education you have obtained.

__ High school with no college level course work

__ High school and some college courses, but do not have a degree or certificate yet. Number of years completed______

__ Two years of college completed with a degree or certificate

__ Bachelors degree

__ Masters degree

__ Doctorate or Post-doctoral degree

__ Other professional degree, specify type____________________

1. On the following pages is a list of activities that may be performed by those working in educational research, development, diffusion and/or evaluation. We understand that your current project work falls appropriately under one or more of those general descriptive headings. The more detailed list of activities or skills given below includes some items that fall under each of the general headings, but for the purposes of this question, it is only important that you respond to each individual item in terms of your present activity without regard to its possible placement under one of the more general area descriptions. Some of the activities in which you engage on your present job may not be included in the list. In order to avoid putting an excessive burden of time and effort on any respondent in completing the questionnaire, a longer, comprehensive list was divided into several parts. You need concern yourself only with the items on this list. Other respondents will respond to other items so as to obtain complete coverage.

Please respond to the activities in the following way:

First, read the activity description, then in Section A, indicate the degree to which you are now involved in it by placing a check mark in the appropriate column.

In Section B, indicate how you acquired the skills involved in the activity i.e., through formal training, or experience on the job, or through a combination of both. However, if you have not acquired the skills for the activity place a check mark in the first column of Section B and leave the remaining columns of Section B blank.

In Section C, show the extent to which you feel a need for further training in skills associated with the activity, regardless of how you answered it in the preceding Section B.

At the top of the table is an example of how a person might respond to the example item of "Developing measuring instruments." This individual indicated "moderate involvement" in the activity, felt that he had acquired the necessary skills mainly through "job experience" and finally, saw a "great need" for additional training in the associated skills.

	Section A				
	Involvement in Activities			How	
R-D-D-E ACTIVITIES	Little or No Involvement	Moderate Involvement	Heavy Involvement	Have Not Acquired Skills	Mos Thr For Educa a Trai
Example: Developing measuring instruments		X			
1. Identifying and delineating significant researchable problems	___	___	___	___	_
2. Formulating hypotheses or empirical questions to be answered by a study	___	___	___	___	_
3. Identifying appropriate research methods	___	___	___	___	_
4. Choosing specific research variables and treatments (where appropriate) to be used	___	___	___	___	_
5. Using a variety of data-gathering methods (tests, interviews, analysis of documents, etc.)	___	___	___	___	_
6. Interpreting and drawing appropriate conclusions and implications from data analyses	___	___	___	___	_
7. Formulating statements of a theory that offers an explanation (cause-effect relationship) of the behavior under study	___	___	___	___	_
8. Conceptualizing educational systems, their elements, and interrelations among these elements	___	___	___	___	_
9. Specifying desired performance outcomes (objectives) of instruction	___	___	___	___	_
10. Describing a product to be developed	___	___	___	___	_
11. Composing effective oral and written forms of instructional communications	___	___	___	___	_
12. Designing and managing field tryouts and tests	___	___	___	___	_

Section B				Section C		
How Skills Were Acquired				Need for Additional Training in Associated Skills		
Have Not Acquired Skills	Mostly Through Formal Education and Training	Mostly Through Experience on the Job	About Equally Through a Combination of Both	Little or No Additional Need	Moderate Need	Great Need for Additional Training
		X				X
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___

Section A

	Involvement in Activities			How	
R-D-D-E ACTIVITIES	Little or No Involvement	Moderate Involvement	Heavy Involvement	Have Not Acquired Skills	Most Thro Form Educa an Train
13. Defining and analyzing characteristics of target group(s) for product dissemination	___	___	___	___	___
14. Selecting the most effective dissemination vehicles to convey information to target groups	___	___	___	___	___
15. Implementing actual dissemination, including the direction of technical production personnel	___	___	___	___	___
16. Specifying nature of a product demonstration	___	___	___	___	___
17. Identifying features of an adopting organization or system which differ from those in which a product was developed and tested	___	___	___	___	___
18. Devising and conducting long-range evaluation of an installed product package	___	___	___	___	___
19. Identifying the nature of the standards or norms that decision-makers will apply in interpreting the relevant educational data that may be provided	___	___	___	___	___
20. Explicating the problems that create discrepancies between actual and intended system outcomes and diagnosing the causes of these problems	___	___	___	___	___
21. Helping educational system personnel to establish priorities for selected system objectives	___	___	___	___	___
22. Identifying and rating alternative strategies for attaining the selected educational system objectives	___	___	___	___	___

Section B				Section C		
How Skills Were Acquired				Need for Additional Training in Associated Skills		
Have Not Acquired Skills	Mostly Through Formal Education and Training	Mostly Through Experience on the Job	About Equally Through a Combination of Both	Little or No Additional Need	Moderate Need	Great Need for Additional Training
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___

Section A

R-D-D-E ACTIVITIES	Involvement in Activities			How	
	Little or No Involvement	Moderate Involvement	Heavy Involvement	Have Not Acquired Skills	Most Thro For Educa a Trai
23. Identifying and rating available educational program resources (human, material, and financial) and/or potential sources of support	___	___	___	___	_
24. Identifying alternative tactics to implement selected strategies and choose those that seem most likely to succeed	___	___	___	___	_
25. Anticipating predicted barriers to programs and remaining alert to unanticipated problems that threaten their success	___	___	___	___	_
26. Developing general criteria and designing data collection procedures for application in measuring the effectiveness and efficiency of existing innovative practices and products, i.e., minimum standards and outcomes which indicate successful utilization of practices and products	___	___	___	___	_
27. If necessary, translating program objectives into behavioral terms	___	___	___	___	_
28. Selecting (or developing) and using techniques of measurement to yield information relevant to standards to be used	___	___	___	___	_
29. Collecting and organizing data preparatory to analysis	___	___	___	___	_
30. Deciding how to explain an outcome as a function of plans, procedures, and resources	___	___	___	___	_
31. Specifying changes that need to be made in the context evaluation system due to decisions about program continuation	___	___	___	___	_

Section B				Section C		
How Skills Were Acquired				Need for Additional Training in Associated Skills		
ve Not quired kills	Mostly Through Formal Education and Training	Mostly Through Experience on the Job	About Equally Through a Combination of Both	Little or No Additional Need	Moderate Need	Great Need for Additional Training
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___
___	___	___	___	___	___	___

2. A number of educational areas are listed below. For each of the areas, please indicate the approximate amount of formal course work, graduate or undergraduate, you have completed by placing a checkmark in the appropriate column. If you have had no course work in the area, place the checkmark in the "none" column.

Educational Areas	Number of Courses			
	None (0)	Few (1 or 2)	Several (3 to 5)	Many (6 or more)
1. Statistics	___	___	___	___
2. Learning theory	___	___	___	___
3. Social Psychology	___	___	___	___
4. Audio-Visual Education	___	___	___	___
5. Marketing	___	___	___	___
6. Sociology	___	___	___	___
7. Research design	___	___	___	___
8. Testing and measurement	___	___	___	___
9. Systems theory	___	___	___	___
10. Advertising	___	___	___	___
11. Educational administration	___	___	___	___
12. Political science	___	___	___	___
13. Philosophy of science	___	___	___	___
14. Data processing	___	___	___	___
15. Theories of teaching	___	___	___	___
16. Curriculum development	___	___	___	___
17. Communication theory	___	___	___	___
18. Decision theory	___	___	___	___
19. Information theory	___	___	___	___
20. Journalism	___	___	___	___
21. Anthropology	___	___	___	___
22. Other (specify) ________	___	___	___	___

Circle the three areas from those listed that are most important for your current work, whether or not you have had course work in those areas

3. Since you have been employed in this field how much of the following kinds of training relevant to educational research, development, diffusion, or evaluation have you had? Indicate by placing a check mark in the appropriate column after each kind of training

Type of Training	Amount of Training			
	None	Very little	Moderate	Extensive
Special supervised on the job training or internship				
In-service courses				
Other(specify)				

4. Below is a list of types of employers.

In Section A, indicate the number of years you have been employed by each of the types of employers. If none, write "none" in the space.

In Section B, indicate the relevance of each type of previous employment to your present job by placing a checkmark in the appropriate column. If you have no previous experience put a check mark here _____, and go to the next item.

Previous Employers	Section A	Section B Relevance to present job		
	Number of years	Low	Moderate	High
College or university				
Educational R-D-D-E organizations				
Government				
Business and/or industry				
Other (specify ______________				

5. Indicate any skills you have in educational or R-D-D-E areas that you do not use in your present job. ____

____

____

____

____

____

____

6. To what extent are you satisfied with your present job? Place a checkmark below in the appropriate category.

Completely Satisfied	Satisfied	Undecided	Dissatisfied	Completely Dissatisfied
_____	_____	_____	_____	_____

7. To what extent are there advancement possibilities in your present job? Place a checkmark below the appropriate category.

Highly Probable	Probable	Unknown	Improbable	Highly Improbable
_____	_____	_____	_____	_____

8. Below is a list of types of training or training materials. Indicate the value you place upon each type either to meet current job requirements or advancement plans by placing a checkmark in the appropriate column after each type.

Types of additional training	Little or no value	Some value	Great value
A. Programmed instruction materials for your own use	_____	_____	_____
B. Three to five day institutes	_____	_____	_____
C. Longer institutes	_____	_____	_____
D. One or two week university short courses	_____	_____	_____
E. Correspondence courses	_____	_____	_____
F. Extension courses	_____	_____	_____
G. Other (specify)	_____	_____	_____

9. How important do you feel it is to receive college credit for any additional training you might obtain? Indicate by placing a checkmark below the appropriate category.

Extremely Important	Important	Undecided	Unimportant	Completely Unimportant
_____	_____	_____	_____	_____

If you checked "important" or "extremely important", please give your reasons

____

____

____

PLEASE USE THE NEXT PAGE TO COMMENT ON THE QUESTIONNAIRE.

Comments on the Questionnaire

Since this questionnaire is being tested before preparation in its final form for use throughout the country with educational R-D-D-E personnel, your comments on its content and format are as valuable as the responses you have made. Please comment as frankly as you desire.

For each comment, please reference the page and item number so that we can make the appropriate changes (e.g., page____, item____, "could not understand the meaning of activity #__________"; or, page____, item____, "could not understand what I was supposed to do", and so on.

Appendix C

REVISED EMPLOYER AND EMPLOYEE QUESTIONNAIRES

(Cover Letter from BESE or NCES for LEA Unit Directors)

To The Unit Director:

The study of which the enclosed questionnaire is a part is sponsored by the Research Training Branch of the National Center for Educational Research and Development. We urgently require data collected nationally and on a valid statistical basis in order to plan programs to meet the demand for trained personnel in Educational Research, Development, Diffusion and Evaluation. We ask, therefore, that you cooperate in filling out and returning the brief questionnaire promptly.

In addition to the information obtained through the use of the enclosed questionnaire sent to project and unit directors and leaders, it is necessary to determine the perceptions of other project and unit personnel on related questions. For that purpose, a second brief questionnaire has been prepared. In order to select a sample of individuals to whom the second questionnaire will be sent we ask that you provide the survey contractor with a list of some of your unit personnel chosen as indicated on the cover page of the questionnaire.

The study findings should be of substantial benefit to everyone concerned with Educational Research, Development, Diffusion and Evaluation in helping to insure an adequate supply of trained personnel.

Your assistance is essential in providing valid and reliable information. It is very much appreciated.

(Employer Questionnaire Cover Letter for LEA Unit Directors)

SURVEY OF PERSONNEL IN EDUCATIONAL RESEARCH DEVELOPMENT, DIFFUSION, EVALUATION AND PLANNING ACTIVITIES

To the Unit Director:

The following questionnaire is concerned with employment demand and training needs for personnel in Educational Research, Development, Diffusion, Evaluation (R-D-D-E) and for those in Educational Planning. These activities are described on the following page. It is part of a study designed to assist in planning for the development and support of federally sponsored programs to respond to requirements for trained personnel (and training capabilities) in educational R-D-D-E. Because relevant, accessible training programs and training materials are important to both employers and employees in these fields, we earnestly request your cooperation in filling out the questionnaire.

The survey is sponsored by the Research Training Branch of The National Center for Educational Research and Development and is the first survey of educational R-D-D-E personnel activities and training that has been conducted on the basis of a rigorous sampling design so that reasonable estimates of personnel in the various sectors of educational R-D-D-E can be made.

Please respond in your capacity as director of your school district's R-D-D-E unit.

In addition to filling out the questionnaire, we ask that you provide us with a listing of the names of project personnel who serve in professional or paraprofessional capacities, as those categories are defined in Item 2 of the questionnaire, and on the enclosed sheet provided for the listing. The lists will form a basis for designing a sample of individuals to whom an additional questionnaire concerned with work activities and training will be sent.

We realize the sensitivity of some of the information requested, and assure you that all data will be treated completely confidentially and the material will be analyzed and reported only by aggregates, e.g., size of funding, type of R-D-D-E work, etc. The final page of the questionnaire contains a brief explanation of the reasons for asking the various questions and the use that will be made of the answers. In addition, we are enclosing a prepaid post card. If you would like to receive a brief summary of the report resulting from the survey, check the appropriate box on the card and return it to us.

Please return the questionnaire and the employee listing in the enclosed stamped, self-addressed envelope.

Your prompt attention and cooperation will be very much appreciated.

Educational R-D-D-E Activities

Educational Research includes activities which produce reliable knowledge about new facts, principles or theories. It employs the procedures of problem stating or hypothesis formulation, design, measurement and analysis, in order to permit the generalization of findings and replication, also, for purposes of verification. Educational research may be directed to highly diverse areas of investigation, such as the effects of teacher behavior upon student performance, stages of growth and development and their impact upon the learning process, racial-ethnic correlates of intelligence and achievement, and the effects of individualized versus traditional instruction.

Educational Development includes activities which create new educational methods, systems, materials or devices which have practical utility. It includes the design of new products, and field testing to determine their feasibility and the need for further modifications. Development also generates new products such as curriculum materials, teaching techniques, instructional media, ways of assigning pupils to school and architectural designs.

Educational Diffusion involves procedures which create the necessary conditions for the adoption and utilization of new educational products or techniques. It includes activities such as the conduct of demonstrations, installation of new products on a trial basis, making adaptations to local school situations and making widespread dissemination of information about new educational products and their proven effectiveness.

Educational Evaluation includes activities that are necessary for determining the effectiveness of educational programs, products or procedures. It may be done rigorously through deriving objective measures of effectiveness under carefully defined conditions and by comparing results against standards; or, evaluation may be conducted through more informal methods such as ratings. Many measures are used in evaluation that include student gains, teacher ratings, standardized aptitude scores, costs of educational programs and measures of time-to-completion of educational functions being studied.

Educational Planning and Analysis includes activities directed toward the establishment of goals and objectives within operating constraints, and the development of strategies for attaining objectives after they have been ordered for priority. Outcomes may be evaluated by rigorous techniques such as economic, systems or psychometric analyses; however, informal observation techniques may be used also. Adjustment is made in objectives by educational planners through a process of feedback. Educational planning involves projects that are highly varied such as assessing educational needs, reorganization of curriculum for individualization, introduction of modular scheduling, goal-setting of achievement levels for disadvantaged students,and the utilization of para-professionals and teacher aides.

QUESTIONNAIRE A (School District)

Training and Personnel Requirements

R-D-D-E (Supervisor Questionnaire)

Name of School District ____________________________________

____

Name of Respondent ____________________________________

Name of Unit Supervised by Respondent ______________________

____

Position Title of Respondent ____________________________

____

Address ____

____

Telephone ____

Please describe briefly the kinds of projects in which your unit typically engaged and the major functions your unit performs in the school district.

Description of projects: ______________________________

____

____

Major functions: ____________________________________

____

____

____

Please enter the level of funding of the unit in which Research, Development, Diffusion and Evaluation work is done in the appropriate spaces. If data are not available, make the best estimate you can.

Approximate level of unit funding from all sources for current fiscal year $__________

Approximate level of unit funding from all sources for next fiscal year $__________

Approximate percent of current fiscal year unit funds from:

___% Local School District

___% County Office of Education

___% State Office of Education (Specify)__________

___% U. S. Office of Education

___% Office of Economic Opportunity

___% Private Foundations

___% Other (Specify)______________________________

PLEASE ASSURE THAT ABOVE PERCENTAGES ADD TO 100%

1. In order to help us classify your project or unit work, which may involve several educational Research, Development, Diffusion, Evaluation, or related planning and management tasks, please indicate the degree to which each of the following activities is part of the work effort on your project or in your unit.

Indicate the degree of project involvement in each activity by placing one of the following letters in the space provided before each item:

Place an "L" in the space if a large part of the effort is devoted to the activity.

Place an "M" in the space if a moderate part of the effort is devoted to the activity.

Place an "S" in the space if a small part of the effort is devoted to the activity.

Place an "N" in the space if no part of the effort is devoted to the activity.

Level of Effort

1. _____ Conducting basic scientific inquiry related to educational problems.
2. ____ Conducting applied research studies directly related to educational problems.
3. ____ Investigating and assessing educational needs and requirements.
4. ____ Gathering and providing information for program planning and design.
5. ____ Developing new products or solutions for educational programs.
6. ____ Testing and evaluating innovative solutions and programs.
7. ____ Creating widespread awareness of tested solutions and programs.
8. ____ Demonstrating effectiveness of solutions and programs to target audiences.
9. ____ Training target audiences in the use of solutions and programs.
10. ____ Financial planning, and accounting for resources and expenditures.
11. ____ Preparing reports, documentation, etc.
12. ____ Training project/agency personnel to perform any R-D-D-E activity.
13. ____ Other (specify) ____
____
____

2. Below is a list of definitions of personnel categories for individuals involved in R-D-D-E.

- Professional

  Substantial responsibility for carrying out project or unit tasks independently

- Paraprofessional

  Responsibility for carrying out project or unit tasks under moderate to heavy supervision, with little independence of action

- Technical

  Trained for and carries out specific project activities such as computer programming, audio-visual aid preparation, or art work

- Clerical

  Routine typing, filing,numerical and other clerical tasks

The categories are given in the table below. Please indicate in the spaces provided for each category, the number of full-time individuals you employ on the project or in the unit, the number of part-time individuals and the number of full-time equivalents.

Personnel Category	Full Time	Part Time	Full-time Equivalents
Professional	____	____	____
Paraprofessional	____	____	____
Technical	____	____	____
Clerical	____	____	____

3. Please list the names of project or unit personnel in professional and paraprofessional categories on this sheet. Use personnel category definitions in the previous item.

The attached list of personnel has been supplied by the U. S. Office of Education. Please include these names on the list below if they are still working on the project, and add any new personnel not on the Office of Education list.

After each name, indicate whether the individual works full time on the project or part itme. If full time, place an "F" in the space. If part time, indicate the fraction that is worked, i.e., ½, ¼, etc. in the space.

Professional

Name	Fraction Of Time Worked

Paraprofessional

Name	Fraction Of Time Worked

4. Indicate for each personnel category the number of currently unfilled positions, the number of losses in the last year and the number of personnel added in the last year. (If none, write "none" opposite the appropriate category.) Refer to category definitions in Question 2.

Personnel Categories	Number of currently unfilled positions	Number of losses in last year	Number of additions in last year
Professional	____	____	____
Paraprofessional	____	____	____
Technical	____	____	____
Clerical	____	____	____

Indicate major reasons for current vacancies, if any.______________

____

Indicate major reasons for losses, if any.______________________

____

Indicate major reasons for additions, if any.___________________

____

5. How many employees do you anticipate hiring in the next two years for each of the following levels? (If none, write "none" opposite the appropriate category.) Refer to category definitions given in Question 2.

Personnel Categories	Number to be Hired
Professional	____
Paraprofessional	____
Technical	____
Clerical	____

6. If your funding were to be increased by a quarter (25% more than current funding) in the next year:

   A. How many people would you need in addition to present staff and at what levels? (e.g., "3 professionals"). Use the personnel categories given in Question 2.______________________

   ____

   B. What kinds of skills would they represent (e.g., proposal writing, statistical analysis)______________________________

   ____

7. Listed below are several kinds of in-house employee training. Check those you have used during the past year.

In-House Employee Training	Used During Past Year
A. Special supervised OJT or internship	____
B. One to two-week short courses	____
C. One to five-day seminars or institutes	____
D. Longer courses	____
E. Other (specify)______________________ ____________________________________	____

8. How much value do you place on the following training approaches for current employees?

Place a check mark in the appropriate "value" column

Training Approaches	Value of Approach		
	Little or no value	Moderate value	Great value
A. Three to five-day institutes or seminars	____	____	____
B. Longer institutes	____	____	____
C. One to two-week short courses	____	____	____
D. Longer courses	____	____	____
E. Interships in other agencies	____	____	____
F. Correspondence courses	____	____	____
G. Extension or other course arrangements with colleges or universities on a released time basis	____	____	____
H. Extension or other course arrangements with colleges or universities on an employee's own time	____	____	____
I. Other (specify)	____	____	____

9. Have you done any recruiting in the last year? Yes____ No____

If you answered "yes", please respond to Question 10 through Question 14.

If you answered "no", turn to page____ and answer Question 14.

(To be answered only if you said "yes" to Question 9)

10. Are there any skills or sensitivities that have been particularly difficult to find in recruiting staff for your project or unit? Yes____ No____

If you answered "yes", please describe.

____

____

____

____

(To be answered only if you said "yes" to Question 9)

11. Have you had difficulty in recruiting personnel with qualifications in specific content areas such as early childhood education, minority education, remedial reading, vocational education or others?

Yes____ No____

If you answered "yes", please specify areas.

____

____

____

____

(To be answered only if you said "yes" to Question 9)

12. Listed below are a number of recruiting procedures. First, place a checkmark in the left hand column by those you have used. Next, for each one that is checked, indicate how effective it has been in finding people with appropriate skills by placing a checkmark in the appropriate column.

		Effectiveness of Recruiting Procedures		
Recruiting Procedures	Have Used	Minimally Effective	Moderately Effective	Very Effective
A. Journal or newspaper advertising	___	___	___	___
B. Professional meeting employment services	___	___	___	___
C. Referral by other employees	___	___	___	___
D. Colleges and university employment services	___	___	___	___
E. Informal survey of professional colleagues	___	___	___	___
F. Review of unsolicited applications	___	___	___	___
G. Recruitment from within	___	___	___	___
H. Other(specify)________ ________________	___	___	___	___

(To be answered only if you said "yes" to Question 9)

13. Listed below are a number of selection techniques. First, place a checkmark in the left hand column by each technique you have used. Next, for each one that is checked, indicate how effective it has been for you in identifying personnel with needed skills by placing a checkmark in the appropriate column.

	Selection Techniques	Have Used	Effectiveness of Selection Techniques		
			Minimally Effective	Moderately Effective	Very Effective
A.	Interviews	___	___	___	___
B.	Tests	___	___	___	___
C.	Application blanks	___	___	___	___
D.	References	___	___	___	___
E.	Work samples	___	___	___	___
F.	Other (specify)	___	___	___	___
	___	___	___	___	___
	___	___	___	___	___

Please comment on any special problems in using the selection techniques.

14. Please comment on any aspects of educational R-D-D-E employment or training that are of interest or concern to you.

Rationale for Questionnaire A Items

Identifying information will be used for preparing tabular presentations and for making comparisons of personnel needs and training in various kinds of R-D-D-E activities.

Responses to Question 1 will provide the basis for classifying projects or units as to their major focus as Research, Development, Diffusion, Evaluation or Planning activities.

Responses to Questions 2 through 6 will provide the basis for analysis of current R-D-D-E personnel structures by category and for analysis of current and projected needs.

Responses to Questions 7 and 8 will indicate kinds of training currently in use and estimates of the worth of various kinds of training in helping educational R-D-D-E employees to upgrade their skills.

Responses to Questions 9 through 13 will provide information on skills and knowledge that are in short supply currently, as indicated by recruiting difficulties, and therefore on areas in which training emphasis might be placed. Effective recruiting procedures and recruiting techniques will also be identified.

(Cover Letter from NCERD or NCES for Project Directors)

To The Project Director:

The study of which the enclosed questionnaire is a part is sponsored by the Research Training Branch of the National Center for Educational Research and Development. We urgently require data collected nationally and on a valid statistical basis in order to plan programs to meet the demand for trained personnel in Educational Research, Development, Diffusion and Evaluation. We ask, therefore, that you cooperate in filling out and returning the brief questionnaire promtply.

In addition to the information obtained through the use of the enclosed questionnaire sent to project and unit directors and leaders, it is necessary to determine the perceptions of other project and unit personnel on related questions. For that purpose, a second brief questionnaire has been prepared. In order to select a sample of individuals to whom the second questionnaire will be sent we ask that you provide the survey contractor with a list of some of your project personnel chosen as indicated on the cover page of the questionnaire.

The study findings should be of substantial benefit to everyone concerned with Educational Research, Development, Diffusion and Evaluation in helping to insure an adequate supply of trained personnel.

Your assistance is essential in providing valid and reliable information. It is very much appreciated.

(Employer Questionnaire Cover Letter for Project Directors)

SURVEY OF PERSONNEL IN EDUCATIONAL RESEARCH, DEVELOPMENT, DIFFUSION, EVALUATION AND PLANNING ACTIVITIES

To The Project Director:

The following questionnaire is concerned with employment demand and training needs for personnel in Educational Research, Development, Diffusion, Evaluation (R-D-D-E), and for those in Educational Planning. These activities are described on the following page. It is part of a study designed to assist in planning for the development and support of federally sponsored programs to respond to requirements for trained personnel(and training capabilities) in educational R-D-D-E. Because relevant, accessible training programs and training materials are important to both employers and employees in these fields, we earnestly request your cooperation in filling out the questionnaire.

The survey is sponsored by the Research Training Branch of The National Center for Educational Research and Development and is the first survey of educational R-D-D-E personnel activities and training that has been conducted on the basis of a rigorous sampling design so that reasonable estimates of personnel in the various sectors of educational R-D-D-E can be made.

Please respond in your capacity as director or leader of a federally funded R-D-D-E project. Your responses to the items should have reference to the major such project on which you serve in a leadership capacity.

In addition to filling out the questionnaire, we ask that you provide us with a listing of the names of project personnel who serve in professional or paraprofessional capacities, as those categories are defined in Item 2 of the questionnaire, and on the enclosed sheet provided for the listing. The lists will form a basis for designing a sample of individuals to whom an additional questionnaire concerned with work activities and training will be sent.

We realize the sensitivity of some of the information requested and assure you that all data will be treated completely confidentially and the material will be analyzed and reported only by aggregates, e.g., size of funding type of R-D-D-E work, etc. The final page of the questionnaire contains a brief explanation of the reasons for asking the various questions and the use that will be made of the answers. In addition, we are enclosed a prepaid post card. If you would like to receive a brief summary of the report resulting from the survey, check the appropriate box on the card and return it to us.

Please return the questionnaire and the employee listing in the enclosed stamped, self-addressed envelope.

Your prompt attention and cooperation will be very much appreciated.

Educational R-D-D-E Activities

Educational Research includes activities which produce reliable knowledge about new facts, principles or theories. It employs the procedures of problem stating or hypothesis formulation, design, measurement and analysis, in order to permit the generalization of findings and replication, also, for purposes of verification. Educational research may be directed to highly diverse areas of investigation, such as the effects of teacher behavior upon student performance, stages of growth and development and their impact upon the learning process, racial-ethnic correlates of intelligence and achievement, and the effects of individualized versus traditional instruction.

Educational Development includes activities which create new educational methods, systems, materials or devices which have practical utility. It includes the design of new products, and field testing to determine their feasibility and the need for further modifications. Development also generates new products such as curriculum materials, teaching techniques, instructional media, ways of assigning pupils to school and architectural designs.

Educational Diffusion involves procedures which create the necessary conditions for the adoption and utilization of new educational products or techniques. It includes activities such as the conduct of demonstrations, installation of new products on a trial basis, making adaptations to local school situations and making widespread dissemination of information about new educational products and their proven effectiveness.

Educational Evaluation includes activities that are necessary for determining the effectiveness of educational programs, products or procedures. It may be done rigorously through deriving objective measures of effectiveness under carefully defined conditions and by comparing results against standards; or, evaluation may be conducted through more informal methods such as ratings. Many measures are used in evaluation that include student gains, teacher ratings, standardized aptitude scores, costs of educational programs and measures of time-to-completion of educational functions being studied.

Educational Planning and Analysis includes activities directed toward the establishment of goals and objectives within operating constraints, and the development of strategies for attaining objectives after they have been ordered for priority. Outcomes may be evaluated by rigorous techniques such as economic, systems or psychometric analyses; however, informal observation techniques may be used also. Adjustment is made in objectives by educational planners through a process of feedback. Educational planning involves projects that are highly varied such as assessing educational needs, reorganization of curriculum for individualization, introduction of modular scheduling, goal-setting of achievement levels for disadvantaged students, and the utilization of para-professionals and teacher aides.

QUESTIONNAIRE A (Project)

Training and Personnel Requirements

R-D-D-E (Project Director Questionnaire)

Project Title ______________________________

Project Director ______________________________

Position Title ______________________________

Address ______________________________

____

Telephone ______________________________

Agency Receiving Contract or Grant ______________________________

Agency Director and Title ______________________________

____

Address ______________________________

____

Telephone ______________________________

Sponsoring/Funding Agency ______________________________

Agency Department ______________________________

Project Officer ______________________________

Primary Project Objective ______________________________

____

Starting Date of Project ______________________________

Ending Date of Project ______________________________

Place a checkmark beside the type of organization in which the project resides:

___Educational R&D Center

___Educational Laboratory

___College, School of Education, Department or other university office

___Private nonprofit organization

___Industry or commercial organization

___Public School or School District

___State Department of Education

___Professional Association

___Agency of Federal Government

Specify department________________

____

___Other (specify) ________________________________

____

Approximate level of project funding from all sources for current fiscal year

$ ________________

Approximate level of project funding from all sources for last fiscal year

$ ________________

Anticipated level of project funding from all sources next fiscal year

$ ________________

Approximate percent of current fiscal year project funds from:

____% U.S. Office of Education

____% Office of Economic Opportunity

____% National Science Foundation

____% Other federal agencies (specify)________________

____% State (specify)________________

____% Private Foundations

____% Local School District

____% Industry

____% Other (specify)________________

PLEASE ASSURE THAT ABOVE PERCENTAGES ADD TO 100%.

1. In order to help us classify your project or unit work, which may involve several educational Research, Development, Diffusion, Evaluation, or related planning and management tasks, please indicate the degree to which each of the following activities is part of the work effort on your project or in your unit.

Indicate the degree of project involvement in each activity by placing one of the following letters in the space provided before each item:

Place an "L" in the space if a _large_ part of the effort is devoted to the activity.

Place an "M" in the space if a _moderate_ part of the effort is devoted to the activity.

Place an "S" in the space if a _small_ part of the effort is devoted to the activity.

Place an "N" in the space if _no_ part of the effort is devoted to the activity.

Level of Effort

1. ____ Conducting basic scientific inquiry related to educational problems.
2. ____ Conducting applied research studies directly related to educational problems.
3. ____ Investigating and assessing educational needs and requirements.
4. ____ Gathering and providing information for program planning and design.
5. ____ Developing new products or solutions for educational programs.
6. ____ Testing and evaluating innovative solutions and programs.
7. ____ Creating widespread awareness of tested solutions and programs.
8. ____ Demonstrating effectiveness of solutions and programs to target audiences.
9. ____ Training target audiences in the use of solutions and programs.
10. ____ Financial planning, and accounting for resources and expenditures.
11. ____ Preparing reports, documentation, etc.
12. ____ Training project/agency personnel to perform any R-D-D-E activity.
13. ____ Other (specify) ____________________________________

2. Below is a list of definitions of personnel categories for individuals involved in R-D-D-E.

- Professional

  Substantial responsibility for carrying out project or unit tasks independently

- Paraprofessional

  Responsibility for carrying out project or unit tasks under moderate to heavy supervision, with little independence of action

- Technical

  Trained for and carries out specific project activities such as computer programming, audio-visual aid preparation, or art work

- Clerical

  Routine typing, filing, numerical and other clerical tasks

The categories are given in the table below. Please indicate in the spaces provided for each category, the number of full-time individuals you employ on the project or in the unit, the number of part-time individuals and the number of full-time equivalents.

Personnel Category	Full Time	Part Time	Full-time Equivalents
Professional	___	___	___
Paraprofessional	___	___	___
Technical	___	___	___
Clerical	___	___	___

3. Please list the names of project or unit personnel in professional and paraprofessional categories on this sheet. Use personnel category definitions in the previous item.

   The attached list of personnel has been supplied by the U. S. Office of Education. Please include these names on the list below if they are still working on the project, and add any new personnel not on the Office of Education list.

   After each name, indicate whether the individual works full time on the project or part itme. If full time, place an "F" in the space. If part time, indicate the fraction that is worked, i.e., ½, ¼, etc. in the space.

Professional

Name	Fraction Of Time Worked

Paraprofessional

Name	Fraction Of Time Worked

4. Indicate for each personnel category the number of currently unfilled positions, the number of losses in the last year and the number of personnel added in the last year. (If none, write "none" opposite the appropriate category.) Refer to category definitions in Question 2.

Personnel Categories	Number of currently unfilled positions	Number of losses in last year	Number of additions in last year
Professional	____	____	____
Paraprofessional	____	____	____
Technical	____	____	____
Clerical	____	____	____

Indicate major reasons for current vacancies, if any.______________

____

Indicate major reasons for losses, if any.______________

____

Indicate major reasons for additions, if any.______________

____

5. How many employees do you anticipate hiring in the next two years for each of the following levels? (If none, write "none" opposite the appropriate category.) Refer to category definitions given in Question 2.

Personnel Categories	Number to be Hired
Professional	____
Paraprofessional	____
Technical	____
Clerical	____

6. If your funding were to be increased by a quarter (25% more than current funding) in the next year:

   A. How many people would you need in addition to present staff and at what levels? (e.g., "3 professionals"). Use the personnel categories given in Question 2.______________________

   ____

   B. What kinds of skills would they represent (e.g., proposal writing, statistical analysis)______________________

   ____

7. Listed below are several kinds of in-house employee training. Check those you have used during the past year.

In-House Employee Training	Used During Past Year
A. Special supervised OJT or internship	____
B. One to two-week short courses	____
C. One to five-day seminars or institutes	____
D. Longer courses	____
E. Other (specify)____________________ ____________________	____

8. How much value do you place on the following training approaches for current employees?

Place a check mark in the appropriate "value" column

Training Approaches	Value of Approach: Little or no value	Value of Approach: Moderate value	Value of Approach: Great value
A. Three to five-day institutes or seminars	____	____	____
B. Longer institutes	____	____	____
C. One to two-week short courses	____	____	____
D. Longer courses	____	____	____
E. Interships in other agencies	____	____	____
F. Correspondence courses	____	____	____
G. Extension or other course arrangements with colleges or universities on a released time basis	____	____	____
H. Extension or other course arrangements with colleges or universities on an employee's own time	____	____	____
I. Other (specify)	____	____	____

9. Have you done any recruiting in the last year? Yes____ No____

If you answered "yes", please respond to Question 10 through Question 14.

If you answered "no", turn to page____ and answer Question 14.

(To be answered only if you said "yes" to Question 9)
10. Are there any skills or sensitivities that have been particularly difficult to find in recruiting staff for your project or unit? Yes____ No____

If you answered "yes", please describe.

____

____

____

____

(To be answered only if you said "yes" to Question 9)
11. Have you had difficulty in recruiting personnel with qualifications in specific content areas such as early childhood education, minority education, remedial reading, vocational education or others?

Yes____ No____

If you answered "yes", please specify areas.

____

____

____

____

(To be answered only if you said "yes" to Question 9)
12. Listed below are a number of recruiting procedures. First, place a checkmark in the left hand column by those you have used. Next, for each one that is checked, indicate how effective it has been in finding people with appropriate skills by placing a checkmark in the appropriate column.

		Effectiveness of Recruiting Procedures		
Recruiting Procedures	Have Used	Minimally Effective	Moderately Effective	Very Effective
A. Journal or newspaper advertising	___	___	___	___
B. Professional meeting employment services	___	___	___	___
C. Referral by other employees	___	___	___	___
D. Colleges and university employment services	___	___	___	___
E. Informal survey of professional colleagues	___	___	___	___
F. Review of unsolicited applications	___	___	___	___
G. Recruitment from within	___	___	___	___
H. Other(specify)________ ____________________	___	___	___	___

(To be answered only if you said "yes" to Question 9)

13. Listed below are a number of selection techniques. First, place a checkmark in the left hand column by each technique you have used. Next, for each one that is checked, indicate how effective it has been for you in identifying personnel with needed skills by placing a checkmark in the appropriate column.

			Effectiveness of Selection Techniques		
	Selection Techniques	Have Used	Minimally Effective	Moderately Effective	Very Effective
A.	Interviews	___	___	___	___
B.	Tests	___	___	___	___
C.	Application blanks	___	___	___	___
D.	References	___	___	___	___
E.	Work samples	___	___	___	___
F.	Other (specify)	___	___	___	___
	______________	___	___	___	___
	______________	___	___	___	___

Please comment on any special problems in using the selection techniques.

14. Please comment on any aspects of educational R-D-D-E employment or training that are of interest or concern to you.

Rationale for Questionnaire A Items

Identifying information will be used for preparing tabular presentations and for making comparisons of personnel needs and training in various kinds of R-D-D-E activities.

Responses to Question 1 will provide the basis for classifying projects or units as to their major focus as Research, Development, Diffusion, Evaluation or Planning activities.

Responses to Questions 2 through 6 will provide the basis for analysis of current R-D-D-E personnel structures by category and for analysis of current and projected needs.

Responses to Questions 7 and 8 will indicate kinds of training currently in use and estimates of the worth of various kinds of training in helping educational R-D-D-E employees to upgrade their skills.

Responses to Questions 9 through 13 will provide information on skills and knowledge that are in short supply currently, as indicated by recruiting difficulties, and therefore on areas in which training emphasis might be placed. Effective recruiting procedures and recruiting techniques will also be identified.

(Employee Questionnaire Cover Letter)

To The Respondent:

The attached questionnaire relates to one part of a survey of employment demand and training for personnel in Educational Research, Development, Diffusion and Evaluation (R-D-D-E). You have been identified by your supervisor as one who is engaged in one or more of these activities. We ask your cooperation in filling out the questionnaire.

You may have filled out questionnaires that appear to be similar in the past, but this is the first survey of educational R-D-D-E that has been conducted on the basis of a rigorous sampling design so that reasonable estimates of personnel in the various sectors of educational R-D-D-E can be made.

We realize the sensitivity of some of the information requested and assure you that all responses are completely confidential and will be seen only by study personnel. Material will be analyzed only by aggregates, and there will be no reporting of individual responses. Certain questions are being asked in order to compare equality of employment, salary levels, age groupings, etc. with those in other occupations. The final page of the questionnaire contains a brief explanation of the reasons for asking the various questions and the use that will be made of the answers.

When you have completed the questionnaire, please return it directly to us in the attached, stamped, self-addressed envelope.

Your prompt attention and cooperation will be greatly appreciated.

Questionnaire B Project Code No.____

Name (optional)______________________________

Sex

__Male

__Female

Ethnic Identification

__Caucasian

__Black

__Spanish surname

__Oriental

__Other (specify) ______________________

Check the appropriate age category

__Under 25

__25 - 29

__30 - 34

__35 - 39

__40 - 44

__45 - 49

__50 - 54

__55 - 59

__60 - 64

__Over 64

Actual Annual Salary

__ Under $ 3,000

__$ 3,000 - $ 5,999

__$ 6,000 - $ 8,999

__$ 9,000 - $ 11,999

__$12,000 - $ 14,999

__$15,000 - $ 17,999

__ $18,000 - $20,999

__$21,000 - $23,999

__ $24,000 - $26,999

__ $27,000 - $29,999

__ $30,000 or more

If less than full time, indicate approximate fraction of full time that you work, e.g., ¼, ½, etc.____________

Please indicate the complete title of the project or activity on which you are currently working.____

____

____

Write your job title or position ______________________________

How long have you worked in your present job?

Number of years_____ Number of months if less than one year_____

How many people do you supervise in this capacity? If none, write "0".____

Briefly describe what you do on this job.______________________________

____

____

____

____

____

Check the highest level of formal education you have obtained.

___High school with no college level course work

___High school and some college courses, but do not have a degree or certificate yet. Number of years completed___

___Two years of college completed with a degree or certificate

___Bachelors degree

___Masters degree

___Masters degree plus work toward doctorate

___Doctorate or post-doctoral degree

___Other professional degree, specify type________________________

If you have obtained a bachelors or a higher degree, please write in your major field, e.g., education, psychology, etc.________________________

1. Have you been employed previous to your present job? Yes___ No___

If you answered "yes", complete the remainder of this question.
If your answer was "no", go on to the next question.

In Section A, indicate the number of years you have been employed by each type of employer. If none, write "none" in the space.

In Section B, indicate the relevance of each type of previous employment to your present job by placing a checkmark in the appropriate column.

	Section A	Section B		
	Number	Relevance to Present Job		
Previous Employers	of years	Low	Moderate	High
College or university	___	___	___	___
Educational R-D-D-E organizations	___	___	___	___
Government	___	___	___	___
Business and/or industry	___	___	___	___
School district	___	___	___	___
Other (specify)________________	___	___	___	___

2. A number of educational areas are listed below. For each of the areas, please indicate the approximate amount of formal course work, graduate or undergraduate, you have completed by placing a checkmark in the appropriate column. If you have had no course work in the area, place the checkmark in the "none" column.

Educational Areas	Number of Courses			
	None (0)	Few (1 or 2)	Several (3 to 5)	Many (6 or more)
1. Statistics	___	___	___	___
2. Learning theory	___	___	___	___
3. Social Psychology	___	___	___	___
4. Audio-Visual Education	___	___	___	___
5. Marketing	___	___	___	___
6. Sociology	___	___	___	___
7. Research design	___	___	___	___
8. Testing and measurement	___	___	___	___
9. Systems theory	___	___	___	___
10. Advertising	___	___	___	___
11. Educational administration	___	___	___	___
12. Political science	___	___	___	___
13. Philosophy of science	___	___	___	___
14. Data processing	___	___	___	___
15. Theories of teaching	___	___	___	___
16. Curriculum development	___	___	___	___
17. Communication theory	___	___	___	___
18. Decision theory	___	___	___	___
19. Information theory	___	___	___	___
20. Journalism	___	___	___	___
21. Anthropology	___	___	___	___
22. Other (specify)___________	___	___	___	___
______________________	___	___	___	___

Circle the three areas from those listed above that are most important for your current work, whether or not you have had course work in those areas.

3. On the following pages is a list of activities that may be performed by those working in educational Research, Development, Diffusion, Evaluation, and/or Planning. Please indicate the degree to which you are currently involved in each activity by entering a number value between 0 and 7 in the space provided to the left of each item. The numerical scale that you are to use is defined as follows:

___ 0 - Definitely not a part of my work activity.
___ 1 - Only a minor part of my work
___ 2
___ 3
___ 4 - A substantial part of my work
___ 5
___ 6
___ 7 - A most significant part of my work

Those numbers that are not defined may be used in accordance with your best judgment as to their positions on the scale between the anchoring definitions.

In the space following each item, please indicate the degree of your interest in obtaining additional training in the activities specified by using the following symbols:

Place a "G" in the space if you have Great Interest in additional training.

Place an "S" if you have only a Small Interest in additional training.

Place an "N" if you have No Interest in additional training.

Your Current Involvement
(Enter one number
from 0 - 7 scale)

Your Interest In
Additional Training
(Enter "G","S", or "N")

1. ___ Synthesizing literature relevant to a project ___

2. ___ Choosing variables for research or experimental treatment. ___

3. ___ Developing measuring instruments. ___

4. ___ Organizing data for analysis. ___

5. ___ Selecting statistical techniques that are appropriate for analysis or conducting tests of data. ___

6. ___ Using aids in data analysis, such as computer processing. ___

7. ___ Drawing conclusions from data analyses and reporting findings ___

8. ___ Specifying performance objectives of instruction. ___

9. ___ Describing a product to be developed. ___

Your Current Involvement
(Enter one number
from 0 - 7 scale)

Your Interest in
Additional Trainin
(Enter "G","S", or "N

10. ___ Designing and managing field tests ___

11. ___ Revising a product based upon field evaluation. ___

12. ___ Determining characteristics of target groups for product dissemination. ___

13. ___ Selecting the best way to get information to target groups. ___

14. ___ Composing information for widespread dissemination. ___

15. ___ Implementing actual dissemination. ___

16. ___ Devising long term evaluation of an installed product. ___

17. ___ Identifying desired outcomes of an educational system ___

18. ___ Establishing priorities among school system objectives. ___

19. ___ Evaluating strategies for attaining school system objectives. ___

20. ___ Determining educational program resources (human, material, financial). ___

21. ___ Writing proposals for either R, D, D, or E projects. ___

22. ___ Monitoring educational programs to determine deviations from design plans. ___

23. ___ Developing criteria and data collection procedures for measuring effectiveness of innovative practices and products. ___

24. ___ Translating program objectives into behavioral terms. ___

25. ___ Using techniques of measurement to derive data for establishment of standards. ___

26. ___ Other (specify)________________________________ ___

27. ___ Other (specify)________________________________ ___

4. Since you have been employed in this field, how much of the following kinds of training relevant to educational Research, Development, Diffusion, or Evaluation have you had? Indicate by placing a checkmark in the appropriate column after each kind of training.

Type of Training	Amount of Training			
	None	Very little	Moderate	Extensive
Special supervised on-the-job training or internship	___	___	___	___
In-service courses	___	___	___	___
Other (specify)__________ ______________________	___	___	___	___

5. Several approaches to training are listed below. Indicate the value you place upon each approach either to meet current job requirements or plans you might have for personnel advancement. Place a checkmark in the appropriate column after each approach.

Training Approach	Value of Approach		
	Little or no value	Some Value	Great Value
A. Programmed instruction materials for your own use	___	___	___
B. Three to five-day institutes	___	___	___
C. Longer institutes	___	___	___
D. One or two-week university short courses	___	___	___
E. Correspondence courses	___	___	___
F. Extension courses	___	___	___
G. Other (specify)____________	___	___	___

Comments:____

____

____

____

____

6. How important do you feel it is to receive college credit for any additional training you might obtain? Indicate by placing a checkmark below the appropriate category.

Extremely Important	Important	Undecided	Unimportant	Extremely Unimportant
___	___	___	___	___

If you checked "important" or "extremely important", please give your reasons.

____

____

____

____

7. To what extent are you satisfied with your present job? Place a checkmark below in the appropriate category.

Extremely Satisfied	Satisfied	Undecided	Dissatisfied	Extremely Dissatisfied
___	___	___	___	___

Please comment on reasons for satisfaction or dissatisfaction with your job.

____

____

____

____

8. To what extent is advancement probable in your present job? Place a checkmark below the appropriate category.

Highly Probable	Probable	Unknown	Improbable	Highly Improbable
___	___	___	___	___

Please comment on reasons for your estimate of probability of advancement

____

____

____

____

9. Please enter any additional comments below that you would like to make on R-D-D-E employment and training.

Rationale for Questionnaire B Items

Information as to age, sex, ethnic identification, education and salary will make possible comparisons with other occupations.

Job titles and descriptions will permit classification into Research, Development, Diffusion, Evaluation and Planning categories.

Responses to Question 1 will indicate the sources from which employees came in R-D-D-E work and possible relationships between R-D-D-E and other types of employment.

Responses to Question 2 will provide specific information as to educational backgrounds and help to identify training areas for future R-D-D-E employees.

Responses to Question 3 will indicate the relative involvement of R-D-D-E employees in various kinds of activities and will suggest areas of investigation for meeting needs for training.

Responses to Question 4 through 6 will indicate the kinds of training now in process for R-D-D-E personnel, the kinds they feel to be valuable and the importance of college credit for additional training. These responses will have implications for the development of training policy and programs.

Responses to Questions 7 and 8 will indicate job satisfaction and advancement possibilities and will have implications for attracting and recruiting personnel into R-D-D-E work, and providing greater value in these activities for current employees.

Appendix D

COST OF PREPARING AND MAILING QUESTIONNAIRE FOR FIELD TEST

COST OF PREPARING AND MAILING QUESTIONNAIRES FOR FIELD TEST

Cost of preparation

Coordination, typing and proofreading	$ 3.50 per page
Printing from Camera Ready Copy (including collating, folding and binding)	2.70 per page
Fold out master (11" x 17"	17.40 per page
Mailing envelopes (per 100)	2.00
Return envelopes (per 100)	4.80

Postage

Employer plus 4 employee questionnaires (including 5 return envelopes and cover material)	1.20
Employer questionnaire return envelope and cover material	.40
Employer questionnaire return envelope and cover material	.40
Single return	.40

Number printed: Questionnaire A. 125, Questionnaire B. 300

Number of pages printed (32 @ $6.50 per page)	198.00
Cost of foldouts (Photographic negative, plate and printing)	129.00
Number packages sent (71)	85.00
Number singles sent (38)	15.00
Number returned (58)	23.00
Approximate total cost	$456.80

Period includes: from date mailed 11/19, through 12/28/71, first returns received 11/23/71.